

Utah State University

DigitalCommons@USU

Record of Decisions (WY)

Wyoming

1990

Great Divide Resource Area Record of Decision and Approved Resource Management Plan

United States Department of the Interior, Bureau of Land Management

Follow this and additional works at: https://digitalcommons.usu.edu/wyoming_recdecisions



Part of the [Environmental Sciences Commons](#)

Recommended Citation

United States Department of the Interior, Bureau of Land Management, "Great Divide Resource Area Record of Decision and Approved Resource Management Plan" (1990). *Record of Decisions (WY)*. Paper 15.

https://digitalcommons.usu.edu/wyoming_recdecisions/15

This Report is brought to you for free and open access by the Wyoming at DigitalCommons@USU. It has been accepted for inclusion in Record of Decisions (WY) by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.



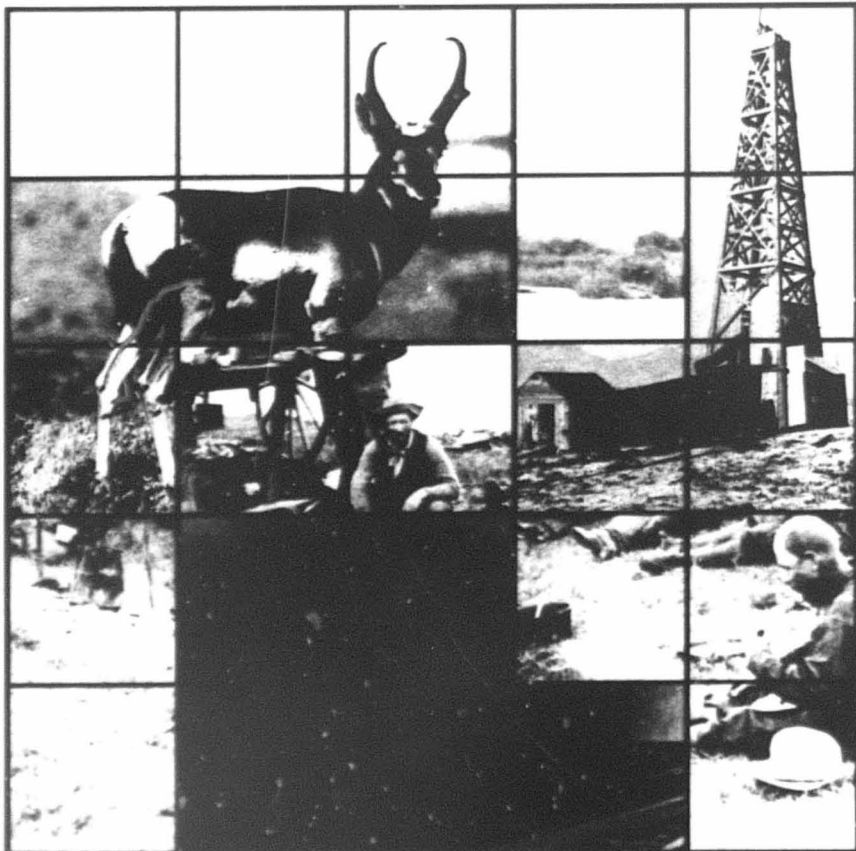


United States Department of the Interior
Bureau of Land Management
Rawlins District Office

Great Divide Resource Area

November 1990

Great Divide Resource Area Record of Decision and Approved Resource Management Plan



The Bureau of Land Management is responsible for the balanced management of the public lands and resources and their various values so that they are considered in a combination that will best serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield; a combination of uses that takes into account the long term needs of future generations for renewable and nonrenewable resources. These resources include recreation, range, timber, minerals, watershed, fish and wildlife, wilderness and natural, scenic, scientific and cultural values.

BLM-WY-PT-91-010-4410

RECORD OF DECISION
 and
APPROVED RESOURCE MANAGEMENT PLAN
 for the
GREAT DIVIDE RESOURCE AREA

Prepared by:
 U.S. Department of the Interior
 Bureau of Land Management
 Great Divide Resource Area
 Rawlins District
 Rawlins, Wyoming

November 1990


 Wyoming State Director

11-8-90
 Date

I

TABLE OF CONTENTS

RECORD OF DECISION	1
DECISION	1
WILDERNESS STUDY AREAS	1
SPECIAL MANAGEMENT AREA DESIGNATIONS	1
ALTERNATIVES CONSIDERED IN DETAIL	1
MANAGEMENT CONSIDERATIONS	2
MITIGATION	2
MONITORING	2
PUBLIC PARTICIPATION	2
CONSISTENCY	2
PUBLIC AVAILABILITY OF THIS DOCUMENT	2
 RESOURCE MANAGEMENT PLAN FOR THE GREAT DIVIDE RESOURCE AREA	 3
INTRODUCTION	3
PLANNING AND MANAGEMENT DECISIONS FOR AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACEC)	3
Como Bluff	3
Designation and Management Objectives	3
Management Actions	3
Cultural and Paleontological Resource Management	6
Minerals Management	6
Sand Hills	6
Designation and Management Objectives	6
Management Actions	6
Fire Management	6
Minerals Management	6
Off-Road Vehicle Management	6
Vegetation/Soils Management	6
Wildlife Habitat Management	6
Jep Canyon	6
Designation and Management Objectives	6
Management Actions	6
Minerals Management	6
Vegetation/Soils Management	9
Shamrock Hills Raptor Concentration Area	9
Designation and Management Objectives	9
Management Actions	9
Vegetation/Soils Management	9
Minerals Management	9
Seminole Raptor Concentration Area	9
PLANNING AND MANAGEMENT DECISIONS BY RESOURCE PROGRAM	 9
Cultural Resources	11
General	11
Management Objectives	11
Management Actions	11
Trails	11
Management Objectives	11
Management Actions	11
National Natural Landmarks	11
Management Objectives	11
Management Actions	11
Paleontological Resources Management Decisions	11

I

CONTENTS

Management Objectives	11
Management Actions	11
Fire Management Decisions	13
Management Objectives	13
Management Actions	13
Forest Management Decisions	13
Management Objectives	13
Management Actions	13
Lands Program Management Decisions	15
Management Objectives	15
Management Actions	15
Utility/Transportation Systems	15
Communications Sites	15
Landownership Adjustments	15
Access	15
Withdrawals	23
Classifications	23
Classification and Multiple Use Act (C&MU) of 1964	23
Other Classifications	24
Livestock Grazing Management Decisions	24
Introduction	24
Management Objectives (General)	24
Management Actions (General)	24
Management Actions Specific to the Medicine Bow Grazing EIS	26
Minerals Management Decisions	26
Leasable Minerals	26
Coal	26
Management Objectives	26
Management Actions	26
Oil and Gas	30
Management Objectives	30
Management Actions	30
Other Leasable Minerals	32
Management Objectives	32
Management Actions	32
Locatable Minerals	32
Management Objectives	32
Management Actions	32
Salable Minerals	32
Management Objectives	32
Management Actions	33
Recreation Management Decisions	33
Management Objectives	33
Management Actions	33
Recreation Areas and Sites	33
Existing Sites	33
New Sites	33
Special Recreation Management Areas	33
Continental Divide National Scenic Trail SRMA	33
North Platte River SRMA	33
Shirley Mountains Cave SRMA	33
Off-Road Vehicle Management	33
General Planning Area	33
Specific Problem Areas	38

CONTENTS

Access to Recreation Areas	38
Consolidation of Landownership	38
Sensitive Plants Management Decisions	38
Gibben's Beardtongue Site	38
Management Objective	38
Management Actions	38
Muddy Gap Cushion Plant Community	38
Management Objective	38
Management Actions	39
Persistent Sepal Yellowcress	39
Management Objective	39
Management Actions	39
Soil, Water, and Air Management Decisions	39
Management Objectives	39
Management Actions	39
Visual Resource Management Decisions	39
Management Objectives	39
Management Actions	39
Wild Horse Management	41
Management Objectives	41
Management Actions	41
Wildlife Habitat and Fisheries Management Decisions	41
Introduction	41
Management Objectives - General	41
Management Actions	41
Habitat Management Areas	41
Raptor Concentration Areas	43
Management Objectives	43
Management Actions	43
Baggs Elk Crucial Winter Range	43
Management Objectives	43
Management Actions	43
White Pelican Island	45
Management Objectives	45
Management Actions	45
Other Areas Important to Wildlife	45
Management Actions	45
Other	45

APPENDIX I - Standard Mitigation Measures	47
---	----

APPENDIX II - Coal Appendix	53
-----------------------------------	----

GLOSSARY	71
----------------	----

MAPS

1 - General Location	4
2 - Como Bluff ACEC	5
3 - Sand Hills ACEC	7
4 - Jep Canyon ACEC	8
5 - Shamrock Hills ACEC	10
6 - General Location of National Natural Landmarks	12
7 - Fire Management	14

CONTENTS

8 - Utilities/Transportation Systems Avoidance Areas	16
9 - Communication Site Categories	17
10 - Lands that may be Considered for Disposal - Albany and Eastern Carbon Counties	18
11 - Lands that may be Considered for Disposal - Northern Carbon and Sweetwater Counties	19
12 - Lands that may be Considered for Disposal - Laramie County	20
13 - Lands that may be Considered for Disposal - Southern Carbon County	21
14 - Areas of Access Need	22
15 - Grazing EIS Areas	25
16 - Important Wildlife Habitats for Special Livestock Grazing Management - Bennett Peak and Prospect Mountain	27
17 - Important Wildlife Habitats for Special Livestock Grazing Management - Miracle Mile	28
18 - Important Wildlife Habitats for Special Livestock Grazing Management - Encampment River Canyon	29
19 - Areas with Potential for Coal Development	31
20 - Recreation Sites	34
21 - Special Recreation Management Areas	35
22 - Shirley Mountains Caves Special Recreation Management Areas	36
23 - Off-Road Vehicle Designations	37
24 - Visual Resources Management Classes	40
25 - Wild Horse Herd Management Areas	42
26 - Baggs Elk Crucial Winter Range	44
27 - Overlapping Crucial Winter Ranges	46
COAL APPENDIX	
28 - Atlantic Rim Coal Area	56
29 - China Butte Coal Area	57
30 - Red Rim Coal Area	58
31 - Indian Springs Coal Area	59
32 - North Indian Springs Coal Area	60

TABLES

1 - Withdrawal Summary	23
2 - Minimum Monitoring Standards	26
3 - Acresages With Seasonal Surface Disturbance Restrictions	32
4 - Ranking of Standard Habitat Types	43

COAL APPENDIX

COAL-AP-1 -	55
-------------------	----

RECORD OF DECISION

This document records the decision made by the Bureau of Land Management for managing approximately 4 million acres of public land surface and 5 million acres of federal mineral estate administered by the Bureau of Land Management (BLM) in the Great Divide Resource Area.

DECISION

The decision is to approve the attached resource management plan (RMP) for the Great Divide Resource Area. The approved RMP (hereafter called the Great Divide RMP) was prepared under the regulations for implementing the Federal Land Policy and Management Act of 1976 (FLPMA) (43 CFR 1600). An environmental impact statement (EIS) was prepared for this plan in compliance with the National Environmental Policy Act of 1969 (NEPA). The Great Divide RMP supersedes all previous land-use planning decisions for the Great Divide Resource Area.

During the 30-day protest period on the Great Divide proposed RMP/final EIS, one protest was received. Mr. Thomas Lustig, Mr. Paul Zogg, Mr. Thomas Dougherty, and Mr. John Zelazny, submitted a protest on behalf of the National Wildlife Federation and the Wyoming Wildlife Federation. Their protest related to the following:

Adequacy of cumulative impact analysis on wildlife in the RMP/EIS

Adequacy of addressing wildlife and livestock grazing conflicts

Adequacy of addressing antelope and fencing conflicts

Adequacy of addressing impacts to bald eagles

Adequacy of protection for the Shamrock Hills Raptor Concentration Area of Critical Environmental Concern; and

The failure of the RMP to designate multiple big game overlapping critical winter ranges as ACECs.

In resolving the protest, it was not necessary to make any changes in the proposed RMP/final EIS.

The selection and approval of the Great Divide RMP is based on the proposed RMP described in the final EIS.

WILDERNESS STUDY AREAS

The BLM's recommendations to the Secretary of the Interior on the Encampment River Canyon, Prospect Mountain, Bennett Mountains, Adobe Town, and Ferris Mountains wilderness study areas (WSAs) will be made in the appropriate Wilderness EISs. Wilderness decisions are not part of this Record of Decision or the Great Divide RMP. The decisions regarding wilderness are ultimately made by Congress and will be incorporated into the Great Divide RMP. Until Congress makes decisions on the WSAs in the Great Divide Resource Area, they will be managed under the interim wilderness management guidelines.

SPECIAL MANAGEMENT AREA DESIGNATIONS

The following areas are designated as Areas of Critical Environmental Concern (ACECs).

Jep Canyon (approximately 13,320 acres)

Como Bluff (approximately 1760 acres)

Shamrock Hills Raptor Concentration Area (approximately 17,280 acres)

Sand Hills (approximately 8,300 acres)

Further information regarding these ACEC and other special management area designations is contained in the Great Divide RMP.

ALTERNATIVES CONSIDERED IN DETAIL

Four alternative plans were considered in detail in the Great Divide RMP/EIS. All alternatives are multiple-use oriented. Each alternative provides for resource production and environmental protection.

Alternative A is the continuation of current management practices (or the "no action" alternative) on the basis of existing land use plans.

Alternative B restricts activities that are causing problems with other resources. Resource conflicts occurring under existing management are resolved through increased restriction of surface-disturbing activities.

Alternative C provides for intensive management of all resources. Surface disturbance impacts would be mitigated or resources would be enhanced while maintaining other resource values.

Alternative D, BLM's preferred alternative and the environmentally preferred alternative, emphasizes a balance between the use of restrictions and the application of intensive management activities.

MANAGEMENT CONSIDERATIONS

The Great Divide RMP represents the best mix of management actions that provide for sustained multiple use management and environmental protection, while allowing reasonable levels of commodity use.

MITIGATION

The Great Divide RMP has been designed to avoid or minimize environmental harm where practicable. Specific mitigation measures are included in the plan.

MONITORING

Required monitoring standards and intervals are identified and established in the Great Divide RMP.


Ray Brubaker
Wyoming State Director
Bureau of Land Management

PUBLIC PARTICIPATION

A public participation plan was prepared and followed to insure that the public would have numerous opportunities to be actively involved in the planning and environmental process. Both formal and informal input have been encouraged and used.

A detailed description of the public involvement in the planning process is part of the planning record and is available at the Great Divide Resource Area Office.

CONSISTENCY

The Great Divide RMP is consistent with the plans, programs, and policies of other federal agencies, the state of Wyoming, and local governments within the planning area.

PUBLIC AVAILABILITY OF THIS DOCUMENT

Copies of the Great Divide RMP are available on request at the Great Divide Resource Area Office:

Area Manager, Bureau of Land Management
Box 670
Rawlins, Wyoming 82301
Telephone: (307) 324-4841

11-8-90

Date

RESOURCE MANAGEMENT PLAN FOR THE GREAT DIVIDE RESOURCE AREA

INTRODUCTION

This Resource Management Plan (RMP) provides the management direction for approximately 4 million acres of public land surface and 5 million acres of federal mineral estate administered by the Bureau of Land Management (BLM) in the Great Divide Resource Area. This Great Divide RMP supersedes all previous planning decisions for the Great Divide Resource Area.

The resource area administrative boundary includes parts of four counties in south central Wyoming (see map 1). The RMP planning area includes the larger communities of Rawlins, Cheyenne, Laramie, and Saratoga. Smaller communities within the area are Arlington, Baggs, Bairoil, Dixon, Elk Mountain, Encampment, Hanna, McFadden, Medicine Bow, Riverside, Rock River, Savary, Sinclair, and Wamsutter.

There are about 12.5 million acres within the general administrative boundary of the Great Divide Resource Area. Of this, about four million acres of both federal surface and federal mineral estate and another one million acres of only federal mineral estate (i.e., federal minerals under state and privately owned land surface) are administered by BLM and covered by this RMP.

The remaining 7.5 million acres within the resource area boundary are not covered by this RMP. On approximately one million of these 7.5 million acres, the federal mineral estate is administered by BLM, while the surface acreage is administered by other federal agencies, primarily the Forest Service. These acres are not addressed because the plans of those other agencies provide the basis for BLM's administration of those minerals resources. The remaining 6.5 million acres of surface and mineral estate are privately owned or owned by the State of Wyoming.

The Great Divide RMP represents a selection of management actions which resolve the planning issues and provide for sustained multiple use management of the public lands and resources.

All resource uses in the planning area must conform with the decisions, terms, and conditions of use described in this plan. Detailed decisions for the implementation of specific projects will be made through activity planning and environmental review that will be completed prior to the implementation of the project. Likewise, the authorization of specific uses will be based on conformance with planning decisions and completion of environmental review.

Planning and Management Decisions for Areas of Critical Environmental Concern (ACEC)

These decisions apply only to the BLM-administered public lands within the boundaries of the ACECs.

The general management direction for each designated ACEC is described in this section. The only management actions presented here are for the specific resource management programs that directly pertain to the issues for each ACEC. Management actions for other programs in the ACECs will be guided by the general RMP decisions found in the other sections of the RMP. Management actions for ACECs include appropriate application of "The Wyoming BLM Standard Mitigation Guidelines for Surface Disturbing Activities (Appendix 1)" and resource program-specific guidelines.

More specific and detailed management prescriptions and monitoring requirements will be identified when activity plans are prepared for each ACEC.

Como Bluff

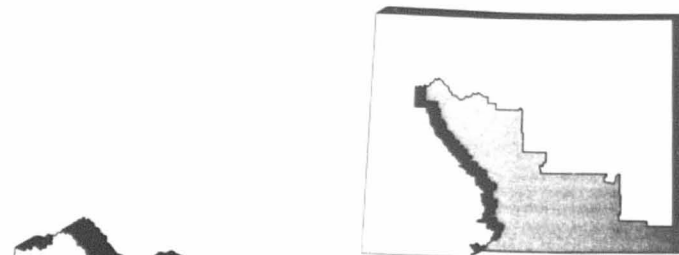
Designation and Management Objectives

The Como Bluff area (1,760 acres of public land) is designated an ACEC (see Map 2).

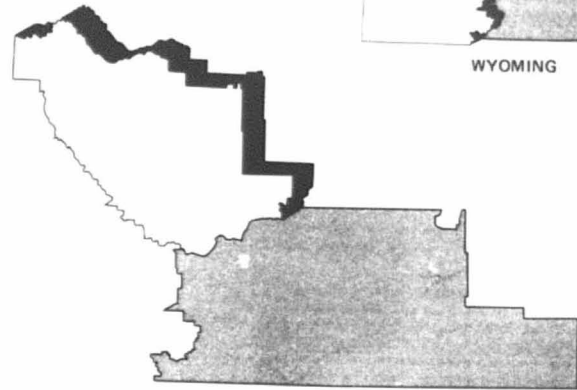
The objectives for management of the Como Bluff ACEC are to manage it in a manner that will maintain the integrity of the Como Bluff National Register District/National Natural Landmark, to preserve historically significant sites, and to allow for mineral development. The National Natural Landmark (NNL) will be managed for its paleontological resource and historical values.

Management Actions

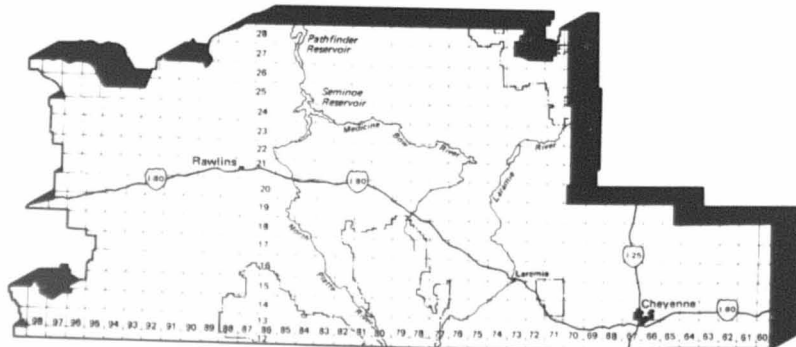
An activity plan will be prepared to provide detailed guidance for management of the Como Bluff ACEC.



WYOMING

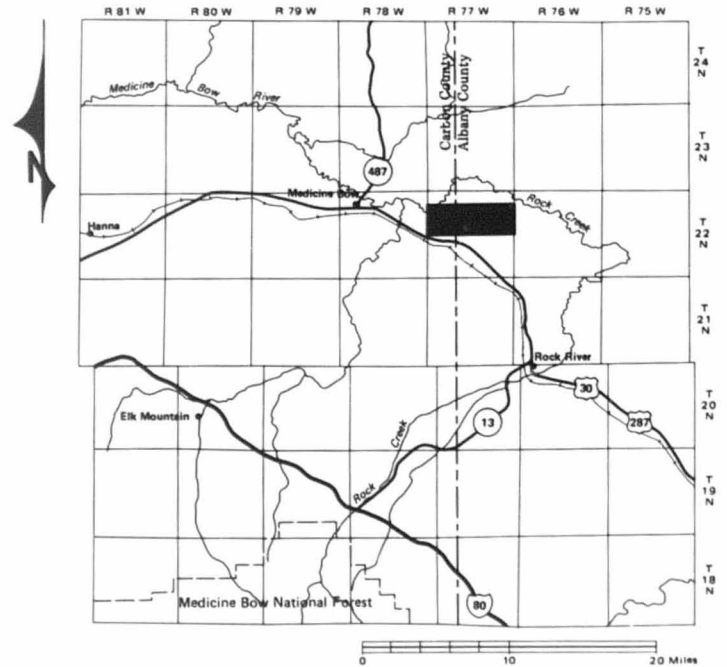


RAWLINS DISTRICT



GREAT DIVIDE RESOURCE AREA

Map 1
GENERAL LOCATION MAP
Great Divide (formerly Medicine Bow-
Divide) Resource Management Plan
November, 1990



ACEC Area

Map 2
COMO BLUFF ACEC
Great Divide Resource Management Plan
November, 1990

RESOURCE MANAGEMENT PLAN

Cultural and Paleontological Resource Management

Within ¼ mile of exposures of the Morrison Formation (a fossil-bearing formation) surface-disturbing activities will be intensively managed. Case-by-case examination of any proposed surface disturbing activity will be made to determine potential adverse effects and appropriate mitigation to minimize those effects.

Minerals Management

Oil and gas leasing will be allowed with intensive management of surface disturbing activities.

Plans of operations will be required for locatable mineral exploration and development (except casual use), regardless of the number of acres that may be disturbed.

Sand Hills

Designation and Management Objectives

The Sand Hills area (about 8,300 acres of public land) is designated an ACEC (See Map 3).

The objectives for management of the Sand Hills ACEC are to protect the unique vegetation complex, maintain wildlife habitat values, minimize soil erosion, and promote recreational opportunities.

Management Actions

An activity plan will be prepared to provide detailed guidance for management of the Sand Hills ACEC.

Fire Management

The ACEC is designated a full fire suppression area with management options (i.e., restrictions may be placed on the use of standard full suppression firefighting techniques).

Minerals Management

Oil and gas leasing will be allowed with intensive management of surface disturbing activities.

Plans of operations will be required for locatable mineral exploration and development (except casual use), regardless of the number of acres that may be disturbed.

Off Road Vehicle Management

Motor vehicle use will be limited to existing roads and trails. Rehabilitation and mitigation practices will be carried out in specific problem areas.

Vegetation/Soils Management

The unique vegetation complex of the Sand Hills area will be protected from sources of disturbance through intensive management of surface-disturbing activities. Case-by-case examination of any proposed surface disturbing activity will be made to determine potential adverse effects and appropriate mitigation to minimize those effects.

Developments, uses, and facilities will be managed temporally (time of year) and spatially (space or distance) to avoid damage to the vegetation.

Wildlife Habitat Management

Inventories will be conducted to identify the location of existing roads and trails, areas that mule deer avoid because of human activities, and areas where soil disturbance and wind erosion are concentrated.

Action plans will be developed to mitigate the effects in identified mule deer behavioral avoidance zones and to rehabilitate concentrated soil disturbance and wind erosion.

Jep Canyon

Designation and Management Objective

The Jep Canyon area (about 13,320 acres of public land) is designated an ACEC (See Map 4).

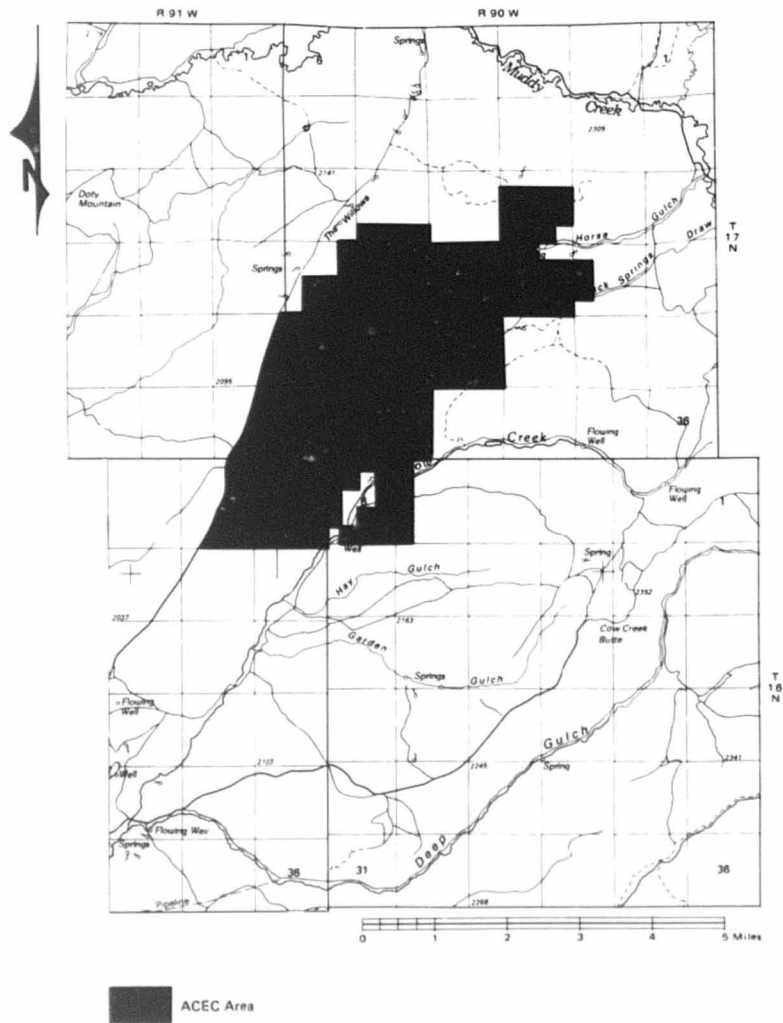
The objectives for management of the Jep Canyon ACEC are to maintain the integrity of crucial winter habitat for elk, to maintain the productivity of nesting raptor pairs, to allow for development of oil and gas and coal, and to seek the cooperation of owners of adjacent property in management of the habitat.

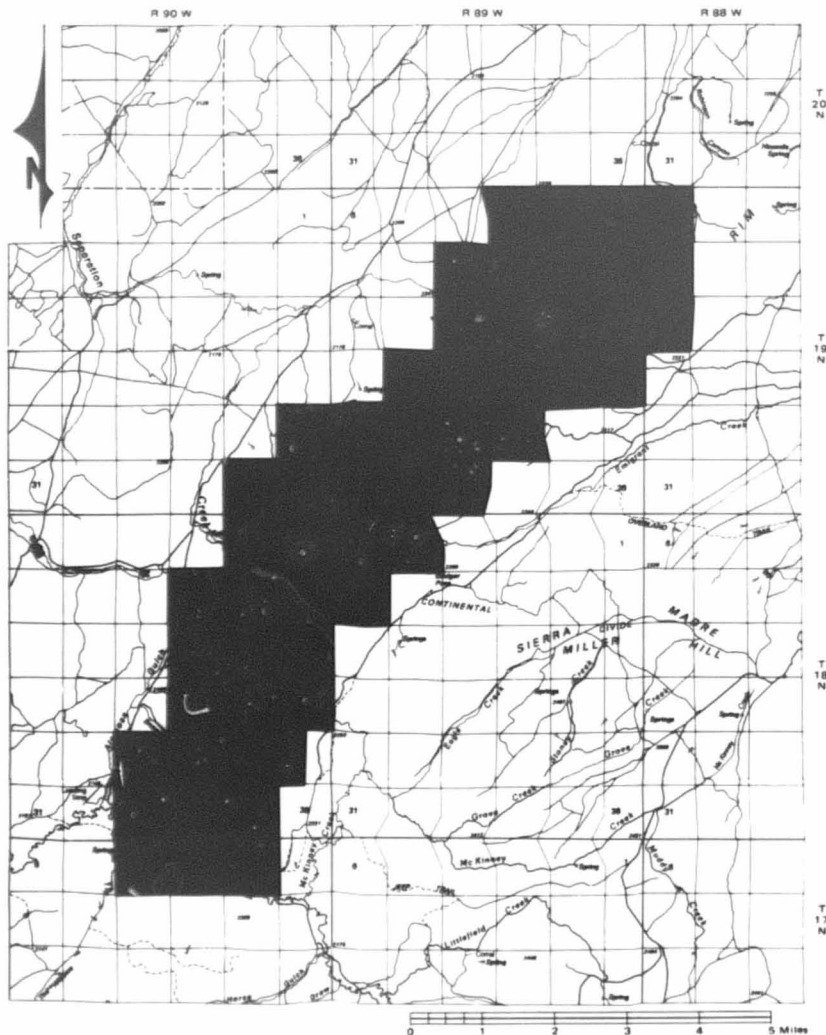
Management Actions

An activity plan will be prepared to provide detailed guidance for management of the Jep Canyon ACEC.

Minerals Management

Oil and gas leasing will be allowed with intensive management of surface disturbing activities.





Map 4
JEP CANYON ACEC
Groat Divide Resource Management Plan
November, 1990

RESOURCE MANAGEMENT PLAN

Plans of operations will be required for locatable mineral exploration and development (except casual use), regardless of the number of acres that would be disturbed.

Coal development will be permitted in the Jep Canyon ACEC with application of mitigation and protection requirements developed during the coal screening process (see Appendix II, Atlantic Rim).

Vegetation/Soils Management

Surface-disturbing activities will be intensively managed to prevent loss of significant habitat. This will entail case-by-case examination of proposals to determine potential adverse effects and appropriate mitigation to minimize those effects. Certain times of the year and certain areas will be avoided by spatial and temporal management of development, facilities, and uses.

Shamrock Hills Raptor Concentration Area

Designation and Management Objectives

The Shamrock Hills Raptor Concentration Area (RCA) (about 17,280 acres of public land) is designated an ACEC (see Map 5).

The objectives for management of this area are to maintain the productivity of nesting raptor pairs, to allow for development of coal and oil and gas, and to seek the cooperation of owners of adjacent property in management of raptor nesting habitat.

Management Actions

An activity plan will be prepared to provide detailed guidance for management of the Shamrock Hills ACEC.

Vegetation/Soils Management

Surface-disturbing activities will be intensively managed to maintain raptor nesting habitat. This will entail case-by-case examination of proposals to determine potential adverse effects and appropriate mitigation to minimize those effects. Developments, uses, and facilities will be managed temporally and spatially to avoid certain times of the year and certain areas.

Minerals Management

Oil and gas leasing will be allowed with intensive management of surface disturbing activities.

Plans of operations will be required for locatable mineral exploration and development (except casual use), regardless of the number of acres in the ACEC that would be disturbed.

Coal development will be permitted in the Shamrock Hills ACEC with application of mitigation and protection requirements developed during the coal screening process (see Appendix II, Indian Springs and North Indian Springs).

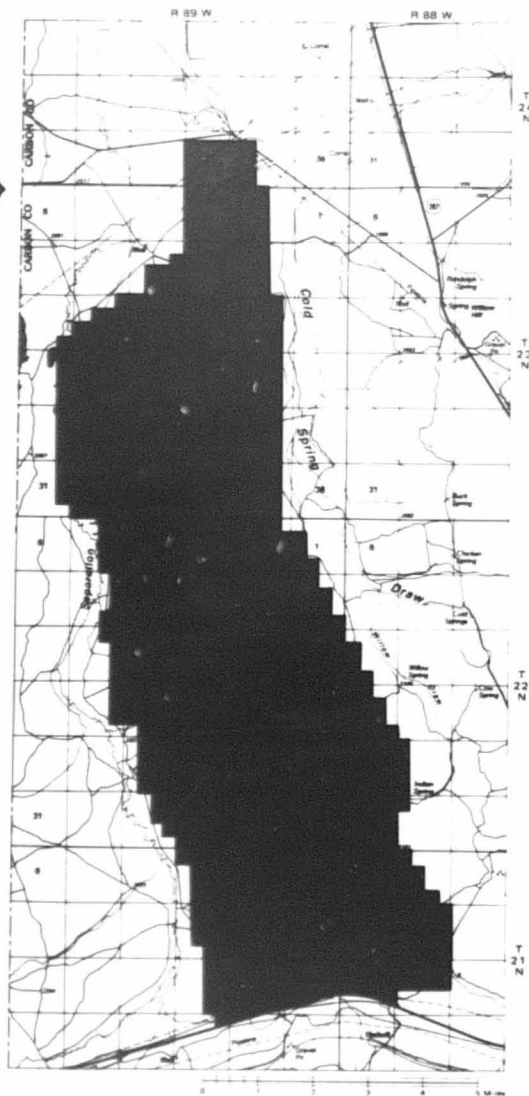
Seminole Raptor Concentration Area

The Seminole Raptor Concentration Area (RCA) was originally proposed for ACEC designation because of its historically high concentrations of nesting ferruginous hawks. Review of nesting activity in the Seminole RCA from 1987 to 1990 determined that only one or two pairs of ferruginous hawks utilized the area for nesting habitat. The decline in ferruginous hawk use is believed to have occurred since the late 1970s following the decline of both prairie dogs and Richardson's ground squirrels inhabiting the area. Ferruginous hawk nests originally located in the 1970s and early 1980s are generally in poor condition. Many of the nests are merely stick remnants now.

For these reasons the Seminole RCA will not be designated an ACEC. However, the area will continue to be monitored. In the event that populations of hawks and prey rebound in the future, management direction in the area will be reconsidered.

PLANNING AND MANAGEMENT DECISIONS BY RESOURCE PROGRAM

The general management actions for each of the following resource programs include application of "The Wyoming BLM Standard Mitigation Guidelines for Surface Disturbing Activities (Appendix I)" and resource program-specific guidelines.



Map 5
SHAMROCK HILLS ACEC
Great Divide Resource Management Plan
November, 1990

RESOURCE MANAGEMENT PLAN

Cultural Resources Management Decisions

General

Management Objectives

To protect and preserve representative samples of the full array of cultural resources for the benefit of scientific and socio-cultural use by present and future generations.

To ensure that cultural resources are given full consideration in all land-use planning and management decisions.

To manage cultural resources so that scientific and socio-cultural values are not diminished, but rather are maintained and enhanced.

To ensure that the BLM's undertakings avoid inadvertent damage to cultural resources both federal and non-federal.

Management Actions

The BLM will conduct Class I, II, or III inventories for actions involving BLM administered public land and/or federal minerals that include surface disturbance as part of the action. The BLM will also evaluate the significance of cultural resources identified during inventory in consultation with the Wyoming State Historic Preservation Office to determine whether the resources are eligible for inclusion on the National Register of Historic Places.

The BLM will categorize cultural resources for management purposes (eg. public use, scientific, socio-cultural).

The above actions will be carried out in accordance with law, policy, and guidance to meet the objectives for cultural resources management. Other actions pertaining to cultural resources are described under ACECs, Fire Management Decisions, and in Appendices I and II.

Trails

Management Objectives

To stabilize and protect significant sites and segments along the Overland Trail, the Cherokee Trail, and the Rawlins-Fort Washakie Trail.

Management Actions

The BLM will seek listing on the National Register of Historic Places for eligible sites along the trails.

The BLM will take appropriate actions (such as protective fencing of trail segments or stabilization of deteriorating buildings) to meet the objectives for significant trail segments.

Where appropriate, the BLM will pursue opportunities to acquire legal access to trail segments.

National Natural Landmarks

Management Objective

To maintain the integrity of existing and proposed NNLS

Management Actions

Lands totaling 160 acres in the Gangplank proposed NNL, 640 acres in the Big Hollow NNL, and 160 acres in the Sand Creek NNL will be considered for disposal to individuals, organizations, agencies, or institutions that would manage these areas in accordance with their NNL status (see Map 6).

Management actions pertaining to the Como Bluff NNL are described in the Como Bluff ACEC section.

Paleontological Resources Management Decisions

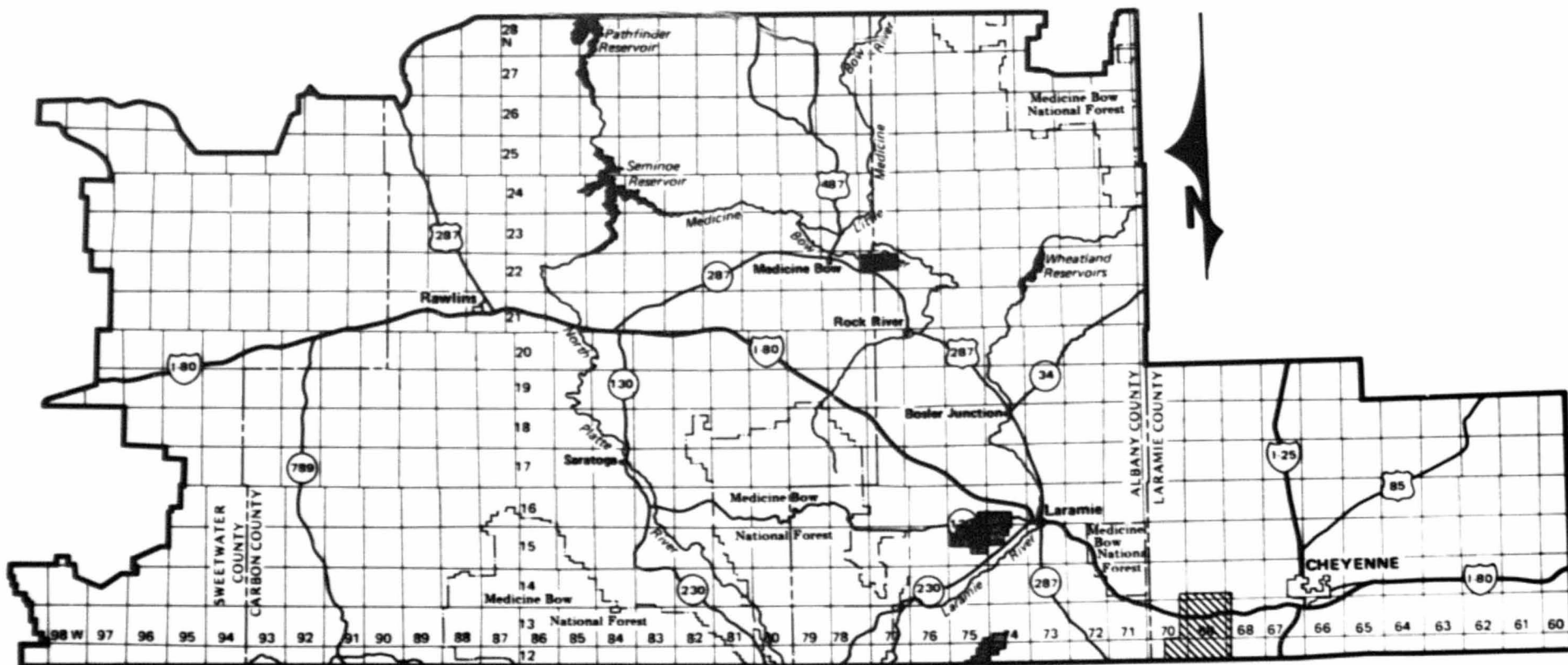
Management Objectives





To maintain the integrity of the scientific value of paleontological resources.

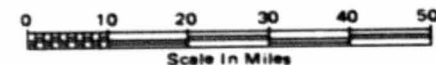
Management Actions

Inventories will be conducted on a case-by-case basis for each proposed surface-disturbing activity to ensure maintenance or integrity of paleontological values.

Other actions pertaining to paleontological resources are described in Appendix II and the Como Bluff ACEC section.



-  Como Bluffs
-  Big Hollow
-  Sand Creek
-  Gangplank (Currently in Nomination Process)



Note: Boundaries are illustrated precisely on individual land ownership status maps.

Map 6
**GENERAL LOCATIONS OF
 NATIONAL NATURAL LANDMARKS**
 Great Divide Resource Management Plan
 November, 1990

RESOURCE MANAGEMENT PLAN

Fire Management Decisions

Management Objectives

To concentrate fire suppression efforts in areas containing high resource and/or human values and in areas with intermingled landownership patterns, and to use prescribed fire to help meet the objectives of other programs (such as the reduction of fuels or the maintenance and/or improvement of wildlife habitat or range condition).

Management Actions

Portions of the planning area are designated for different levels of fire suppression (see map 7).

Full Suppression: Approximately 60% of the planning area is designated a full suppression area. There are no equipment restrictions.

Full Suppression With Management Options: Approximately 3% of the planning area is designated a full fire suppression area "with management options." Restrictions may be placed on the use of standard full suppression firefighting techniques.

Limited Suppression: Approximately 36% of the planning area is designated a limited fire suppression area.

Limited Suppression With Consultation: Approximately 1% of the planning area is proposed for a limited suppression classification following consultation and agreement with the landowners in the area. If agreement cannot be reached to allow limited suppression of wildfires, the area will be managed under a full suppression classification.

A fire management plan will be prepared containing criteria for protecting high resource values such as significant cultural resources, crucial winter range for big game, high priority watersheds, and high-value scenic areas. The fire management plan will include operational aspects of implementing limited suppression designations. An escaped fire analysis will be conducted to determine the appropriate course of action if fires cannot be contained within the first burning period or if they exceed the criteria established for limited suppression.

Prescribed burning will be used to achieve management objectives such as those for allotment management plans (AMPs) and habitat management plans (HMPs). Prescribed fire proposals will be con-

sidered case-by-case to ensure environmental integrity and consistency with multiple resource objectives and activity plans.

Forest Management Decisions

Management Objective

To enhance health and productivity as well as diversity of the forestlands through forest management practices.

Management Actions

The allowable harvest level is 20 million board feet (MMBF) per decade. This will be harvested from the commercial forestlands in the planning area that are available for intensive or restricted management of forest products (about 25,900 acres or 23% of the total forestland in the planning area). Following are the types of actions that will be taken to meet the forest management objectives on these lands.

About 19,200 acres will be intensively managed for forest products. These lands will be managed to achieve a highly productive forest by implementing activities that will enhance tree growth and health. Full consideration will be given to multiple-use values. Timber sales will be concentrated in these areas.

About 6,700 acres will be under restricted management for forest products. Included in this category are areas such as steep slopes and riparian areas with buffer zones around them.

Forest management practices such as timber harvesting, regeneration of disturbed sites, stand replacement and precommercial thinning will be carried out to meet the forest management objectives.

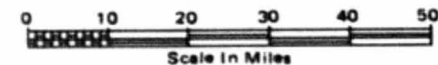
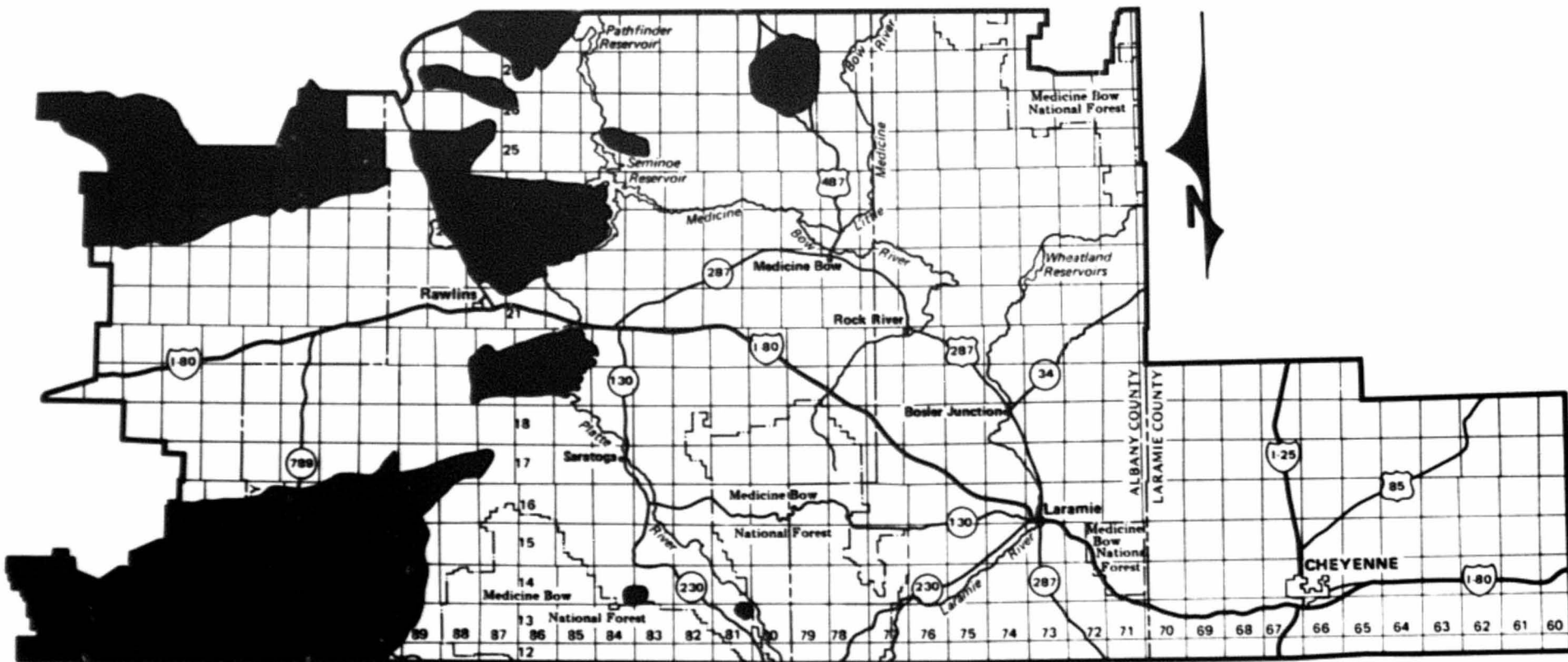
Stands of unmerchantable, nonproductive lodgepole pine will be replaced with young, vigorous trees.

Minor wood products such as fuelwood, posts and poles, Christmas trees, and wildings will be available on demand.

The BLM will pursue opportunities to acquire or maintain legal access to certain areas of public land to support intensive management of commercial forestland (see the Lands Program - Access section for areas of access needs).

Consolidation of landownership on Elk Mountain and Shirley Mountain will be considered as opportunities arise.

About 85,200 acres of other forestlands will be managed only to enhance other uses. Aspen, jun-



- Full Suppression
- Limited Suppression
- Limited Suppression (Need Landowner Consent)
- Full Suppression with Management Options

Map 7
FIRE MANAGEMENT
Great Divide Resource Management Plan
November, 1990

14

RESOURCE MANAGEMENT PLAN

per, and other noncommercial tree species are included in this category.

About 300 acres are not available for management of forest products because the timber is not harvestable and because of the small size of the stands, their scattered locations, or terrain limitations.

Lands Program Management Decisions

Management Objectives

To support the goals and objectives of other resource programs for managing the BLM administered public lands and to respond to public demand for land use authorizations.

Management Actions

Utility/Transportation Systems

All BLM administered public lands will be open to consideration for placement of utility/transportation systems, but such systems will be located next to existing facilities whenever possible.

Areas with important resource values identified on Map 8 will be avoided where possible in planning for new facility placement and routes. If it becomes necessary for facilities to be placed within avoidance areas, effects will be intensively mitigated.

Communication Sites

Communication site plans will be developed for all existing and any new sites (see Map 9). New sites may be established, with appropriate analysis, on a case-by-case basis.

Site categories will be established for all communication sites according to the following criteria:

High-power communication sites will be reserved for broadcast television and radio transmitters of 100 watts or more.

Low-power communication sites will be reserved for microwave, mobile telephone/radio, and other transmitters using fewer than 100 watts.

A 2-mile buffer will be maintained around all communication sites to ensure their integrity.

Landownership Adjustments

About 66,000 acres are identified as available for consideration for disposal under the disposal cri-

teria of FLPMA. These lands may be disposed by any appropriate means permitted under the land laws, including desert land patent, exchange, sale, and recreation and public purpose (R&PP) patent. Specific tracts are identified on Maps 10, 11, 12, and 13.

In addition, proposals for disposal of lands not identified as meeting the FLPMA criteria will be considered if they are consistent with the objectives of the RMP.

Before taking any disposal action, consideration will be given to each individual tract and will include public involvement.

The preferred method of disposal or acquisition of lands by BLM will be through exchange.

Access

Consistent with the Wyoming BLM access policy, the BLM will pursue opportunities to acquire or maintain legal access to the following areas:

High Importance

Arlington (forestry)
Atlantic Rim (recreation)
Big Creek (recreation)
Elk Mountain (forestry)
Ferris Mountains (recreation)
Little Medicine (forestry)
Miller Hill (recreation)
Shirley Mountain (forestry, recreation)

Moderate Importance

North Laramie River (forestry)
Pine Mountain-Split Rock (forestry)
Rawlins Uplift (recreation)
Seminoe-Pathfinder (recreation)
Toltec (forestry)
White Rock Canyon (forestry)

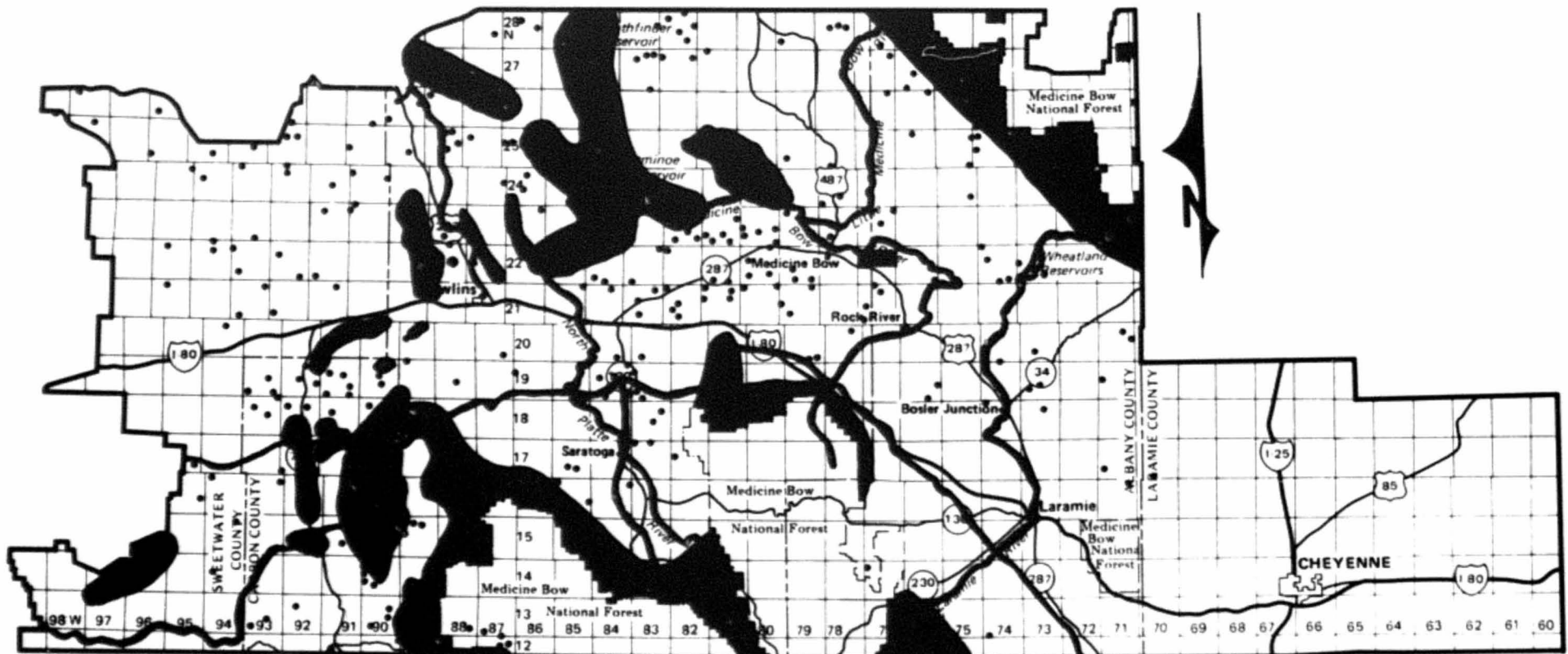
Low Importance

Seven Mile (forestry)
Sugarloaf (forestry)
Woodedge (forestry)
Continental Divide Trail (recreation)

See Map 14 for areas of access need. Additional access needs will be considered as they are identified or as opportunities arise.

Withdrawals

Reviews of withdrawn lands in the planning area, under section 204(l) of FLPMA, will be completed to





The following areas would be avoided, if possible, when permits are granted for surface-disturbing activities. If avoidance is not possible, each situation would be individually analyzed considering facility features, use, time of year, construction techniques, and human presence. Impacts would be carefully mitigated by intensive reclamation, special construction techniques, etc.

Steep slopes (not shown on map - covers 8% of planning area)

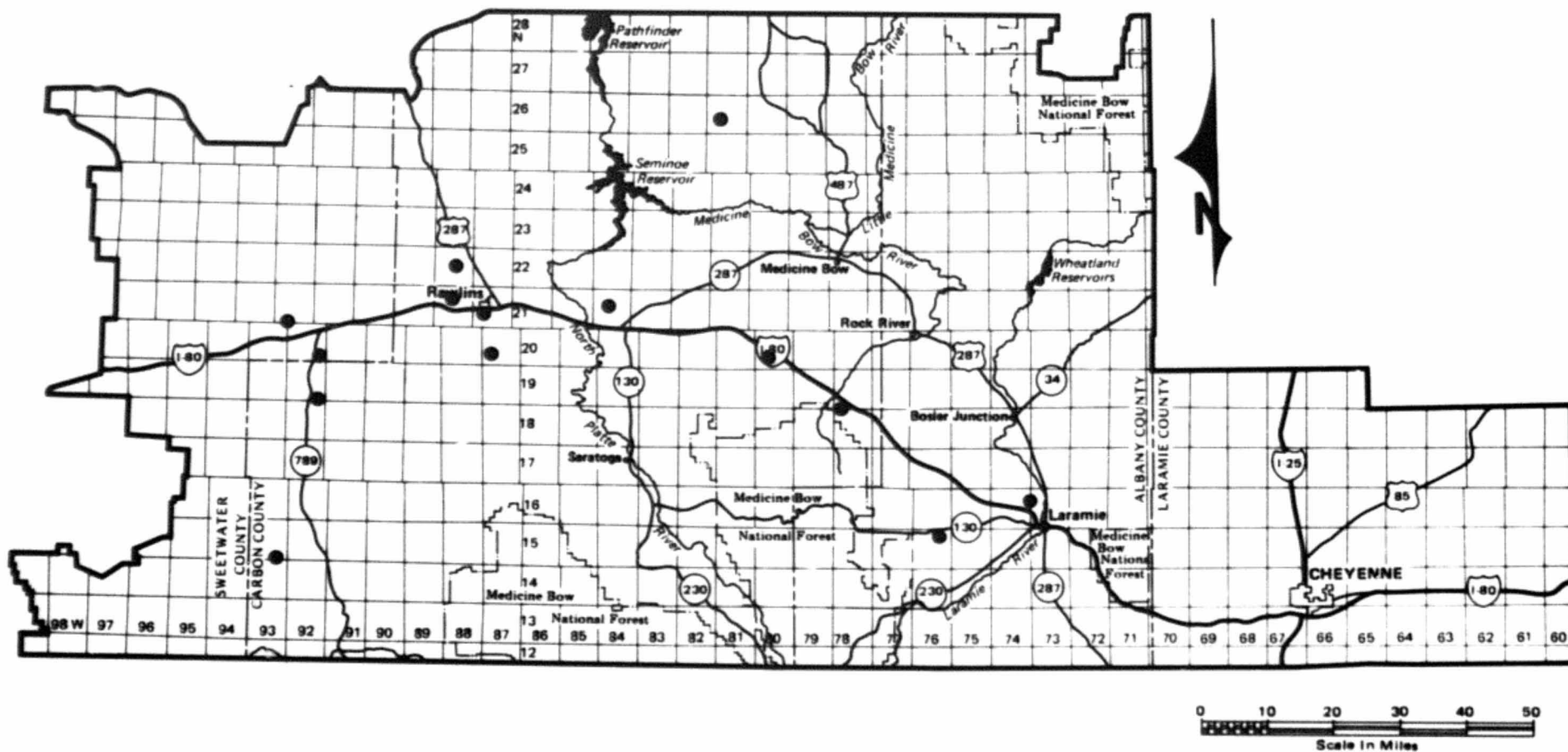
Riparian Areas / Surface Water (only main water bodies shown on map - covers 3¼% of planning area)

High Priority Habitat (not shown on map - covers 6% of planning area - may overlap other areas)

-  Sage Grouse Strutting Grounds (Locations on map are approximate. There may be more leks than are shown on the map)
-  VRM Class I and II Areas, Baggs Elk Crucial Winter Range, Como Bluff Natural History Site, Sand Hills area, Historic Trails, Raptor Concentration areas, and Recreation Areas.

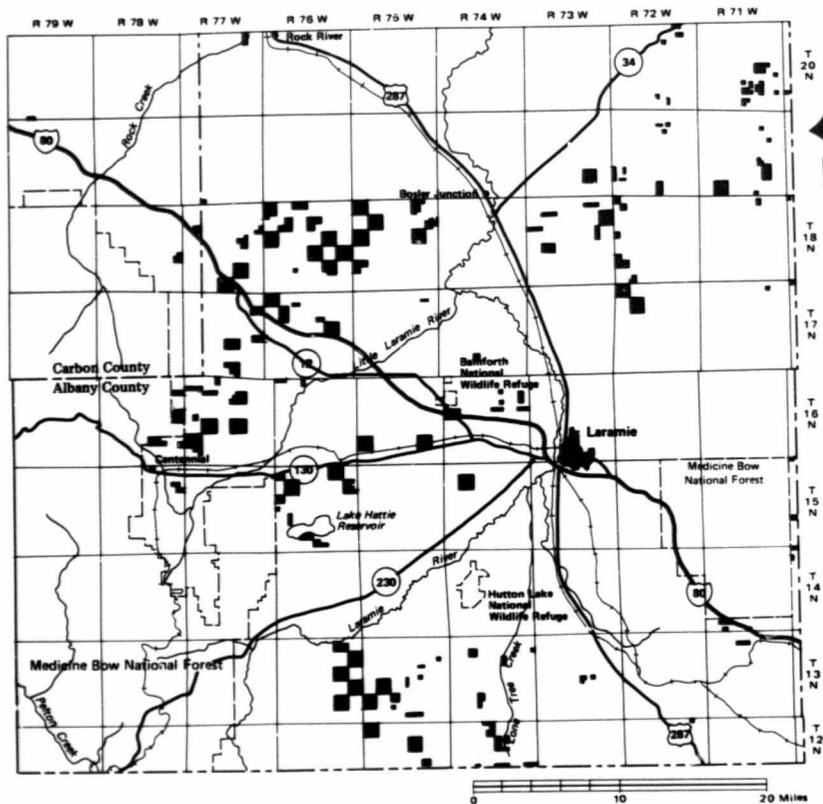


Map 8
UTILITY/TRANSPORTATION SYSTEMS
AVOIDANCE AREAS
Great Divide Resource Management Plan
November, 1990

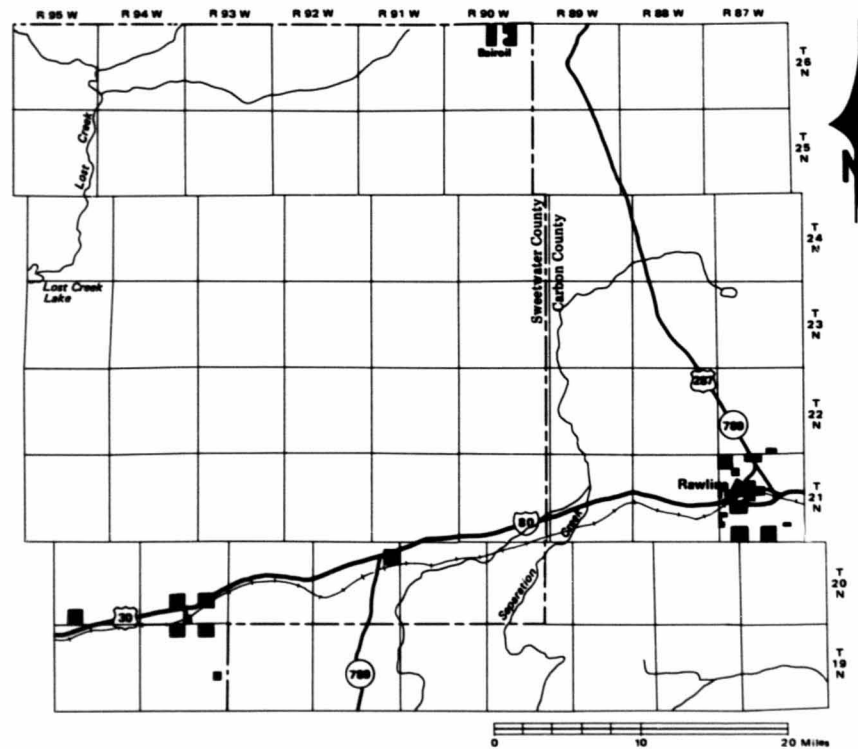


17

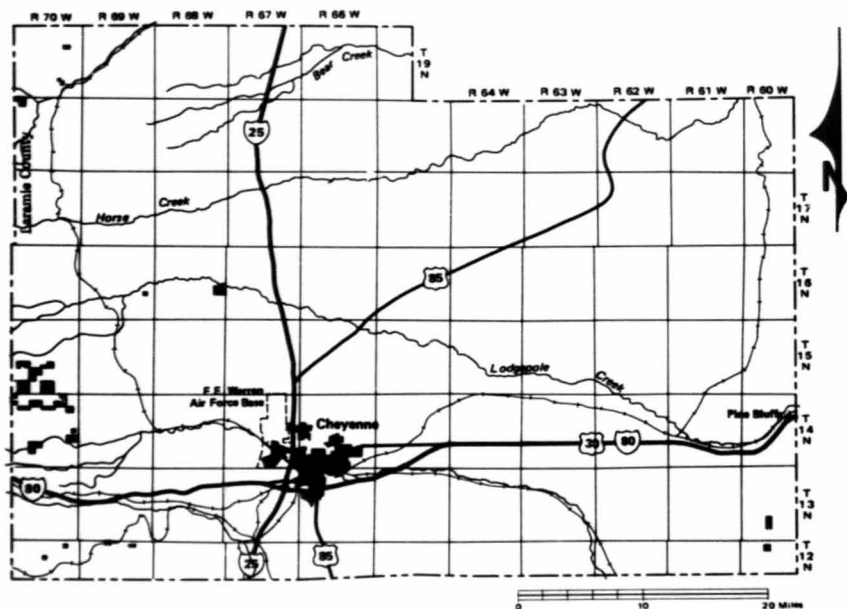
Map 9
COMMUNICATIONS SITE CATEGORIES
 Great Divide Resource Management Plan
 November, 1990



Map 10
LANDS THAT MAY BE CONSIDERED FOR DISPOSAL
ALBANY AND EASTERN CARBON COUNTIES
Great Divide Resource Management Plan
November, 1990

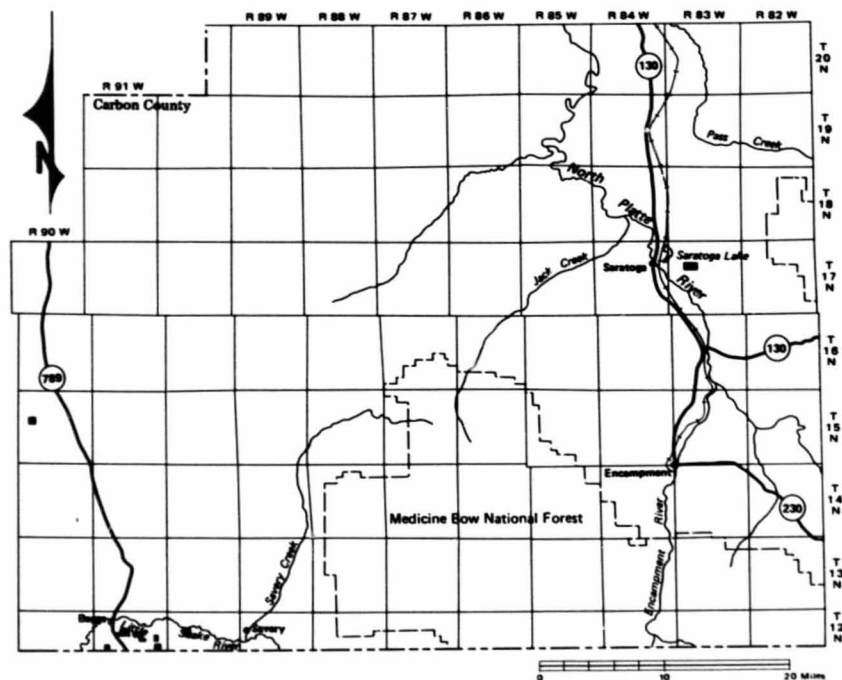


Map 11
LANDS THAT MAY BE CONSIDERED FOR DISPOSAL
NORTHERN CARBON AND SWEETWATER COUNTIES
Great Divide Resource Management Plan
November, 1990



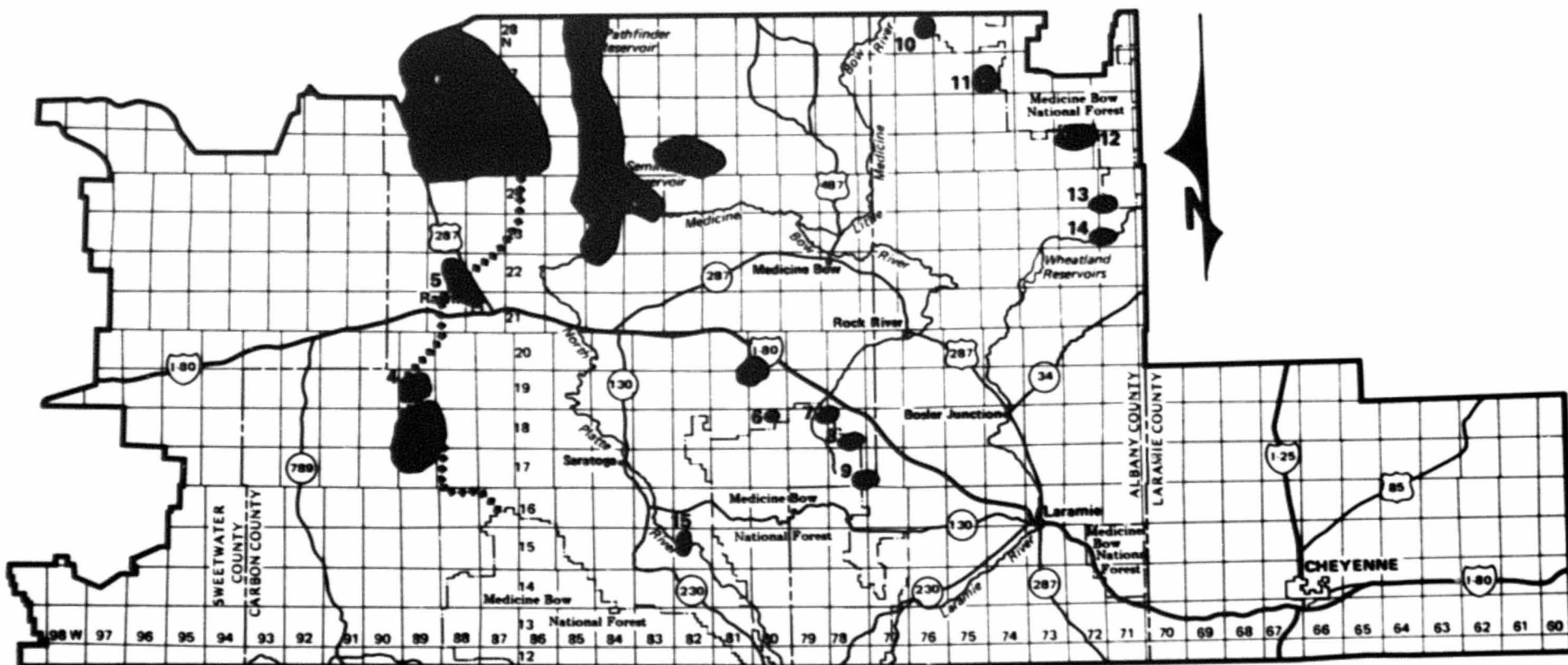
Map 12
LANDS THAT MAY BE CONSIDERED FOR DISPOSAL
LARAMIE COUNTY
Great Divide Resource Management Plan
November, 1990

20



Map 13
LANDS THAT MAY BE CONSIDERED FOR DISPOSAL
SOUTHERN CARBON COUNTY
Great Divide Resource Management Plan
November, 1990

21



Area of Access Needs

***** Continental Divide Trail

1 Elk Mountain

2 Shirley Mountains

3 Miller Hill

4 Atlantic Rim

5 Rawlins Uplift

6 White Rock Canyon

7 Arlington

8 Woodedge

9 Seven Mile

10 Little Medicine

11 Toltec

12 North Laramie River

13 Pine Mountain-Split Rock

14 Sugarloaf

15 Big Creek

16 Seminoe-Pathfinder Reservoirs

17 Ferris Mountains



Map 14
AREAS OF ACCESS NEED
Great Divide Resource Management Plan
November, 1990

RESOURCE MANAGEMENT PLAN

determine whether existing withdrawals are serving or needed for their intended purposes. These reviews are not a part of developing the RMP. Thus, no decisions are made on the termination of any withdrawals in this RMP. The existing withdrawals in the planning area will remain in place unless or until it is determined they should be terminated and, if necessary, a plan amendment to the Great Divide RMP is made. Such determination or amendment will be based upon full examination of the issues associated with withdrawal terminations, including the land use, environmental and other factors associated with opening public lands now closed to entry under the public land laws or to mineral location under the mining laws.

The BLM will initiate new withdrawals which would close areas to operation of the public land laws, including disposal, and to mineral location under the mining laws. This includes recreation sites, 650 acres; historic sites, 1,320 acres; and a rare plant population, 10 acres.

Further information on withdrawals is summarized in Table 1.

TABLE 1
WITHDRAWAL SUMMARY

Type of Withdrawal	Acres ¹
Existing Withdrawals²	
Stratton Hydrology	2,694
Administrative Sites (BLM)	93
Administrative Sites (FS)	720
Reclamation (BuRec)	73,290
Wildlife Refuges (FWS)	3,915
Air Navigation Sites (FAA)	440
Public Water Reserves ⁴	46,095
Oil Shale	564,758
Coal Withdrawals	610,170
Power Sites ⁵	5,150
Stock Driveways ⁵	263,258
New Withdrawal Initiatives²	
Encampment Campground	10
Corral Creek Campground ⁶	20
Bennett Peak Campground	20
Teton Reservoir Campground ⁶	160
Pryor Flats Campground ⁶	40
Dugway Recreation Sites ⁶	320
Nine-mile Recreation Sites ⁶	40
Fort Washakie Stage Station	640
Overland Trail	680
Big Creek Proposed Recreation Site	5
Prospect Creek Proposed Recreation Site	5
Jelm Mountain Proposed Recreation Site	10
Shirley Mountain Proposed Campground ⁶	20
Gibben's Beardtongue Site	10

TABLE 1 (Continued)
WITHDRAWAL SUMMARY

ABBREVIATIONS: BLM = Bureau of Land Management, U.S. Department of the Interior; BuRec = Bureau of Reclamation, U.S. Department of the Interior; FAA = Federal Aviation Administration; FS = Forest Service, U.S. Department of Agriculture; FWS = Fish and Wildlife Service, U.S. Department of the Interior.

¹ Due to overlaps, acreages are not additive.

² Except for powersites and stock driveways, these withdrawals segregate the land against operation of the public land laws and from mineral location under the 1872 General Mining Law.

³ These withdrawals are scheduled for future review. The recommendations from the reviews will be arrived at on a case-by-case basis. It is possible that portions of the Bureau of Reclamation withdrawals may be revoked, returning the lands to the jurisdiction of the BLM.

⁴ The original public water reserve withdrawals included segregation against the location of nonmetalliferous minerals. Withdrawal review reports completed in 1982 revealed that this segregation is unnecessary to protect the water sources. Public Water Reserve 107 also said that all water sources existing on the date of the withdrawal order were protected and withdrawn even if they were not noted to the official records. Therefore, 4,850 acres of previously unrecorded water sources are included.

Public water reserves withdrawn under Secretarial Order 107 and other classification orders will be reviewed to determine if they meet the retention requirements of legal opinions of the solicitor of the Department of the Interior and the agreement made between the state of Wyoming and the Department of Justice (for the Department of the Interior) regarding the adjudication of water rights. Withdrawals will be terminated on public water reserves that do not meet retention requirements.

⁵ These withdrawals segregate the land against operation of the public land laws but not the 1872 General Mining Law.

⁶ These withdrawal initiatives would replace segregations previously established with C&MU classification.

Classifications

Classification and Multiple Use Act (C&MU) of 1964
A notice of classification, published in the Federal Register of November 8, 1967, classified 3,650,000 acres in the planning area for retention and multiple use management. Of this, 3,916 acres of high value recreation lands were also segregated from mineral location. With the expiration of the C&MU Act and the passage of FLPMA, C&MU classifications for retention and multiple use were no longer necessary. Thus, except for the 3,916 acres segregated from mineral location, the C&MU classifications in the planning area were terminated.

RESOURCE MANAGEMENT PLAN

Under the Great Divide RMP these remaining 3,916 acres of C&MU classifications will be terminated and managed as follows:

For those high value recreation areas, where about 600 acres of the C&MU classifications are to be replaced with withdrawals (see Table 1), the classifications will remain in effect until after the new withdrawals are in place.

Withdrawals are not necessary to provide appropriate management for the remaining 3,316 acres. These lands will be managed under the general provisions of the RMP.

2) Other Classifications Classifications on 4,197 acres for potential recreation and Public purpose (R&PP) uses under the R&PP Act of 1926 are no longer necessary and will be terminated.

Classifications on 15 acres for small tract sales are no longer necessary and will be terminated.

With the passage of the Mineral Leasing Act of 1920, all prior coal classifications protecting federal coal from mineral location on 671,768 acres are unnecessary and will be terminated.

Livestock Grazing Management Decisions

Introduction

There are three separate grazing EISs covering the Great Divide RMP planning area. Two of these EISs (the Divide Grazing EIS and the Seven Lakes Grazing EIS) were completed prior to developing the Great Divide RMP. The livestock grazing management decisions for the Divide Grazing EIS area and the Seven Lakes Grazing EIS area (see Map 15) will continue in effect as outlined in the Divide and Seven Lakes Rangeland Program Summaries (RPS). These two RPSs are incorporated into the Great Divide RMP by reference.

The RPS for the Medicine Bow Grazing EIS area (covered in the Great Divide RMP/EIS) will be developed in the near future. In conjunction with that RPS, a single set of priorities encompassing all three grazing EIS areas will be developed to coordinate the entire rangeland management program for the Great Divide planning area.

Management Objective (pertaining to the Great Divide planning area in general)

To enhance livestock grazing while maintaining a balance between economic uses and the enhance-

ment of wildlife habitat, watershed, and riparian areas, and while maintaining or improving range condition over the long term.

Management Actions (pertaining to the Great Divide planning area in general)

Livestock grazing use in the planning area will be continued. Livestock grazing will also be managed to provide for protection or enhancement of other resource values

The total authorized livestock grazing use will not exceed the recognized active preference in the planning area. Currently, this is a maximum of 480,754 Animal Unit Months (AUMs) of annual forage use (161,340 AUMs are in the Medicine Bow Grazing EIS area; 262,101 are in the Divide Grazing EIS area; and 57,313 in the Seven Lakes Grazing EIS area).

The current amounts, kinds and seasons of livestock grazing use will continue to be authorized until monitoring indicates a grazing use adjustment is necessary or that a class of livestock or season of use modification can be accommodated.

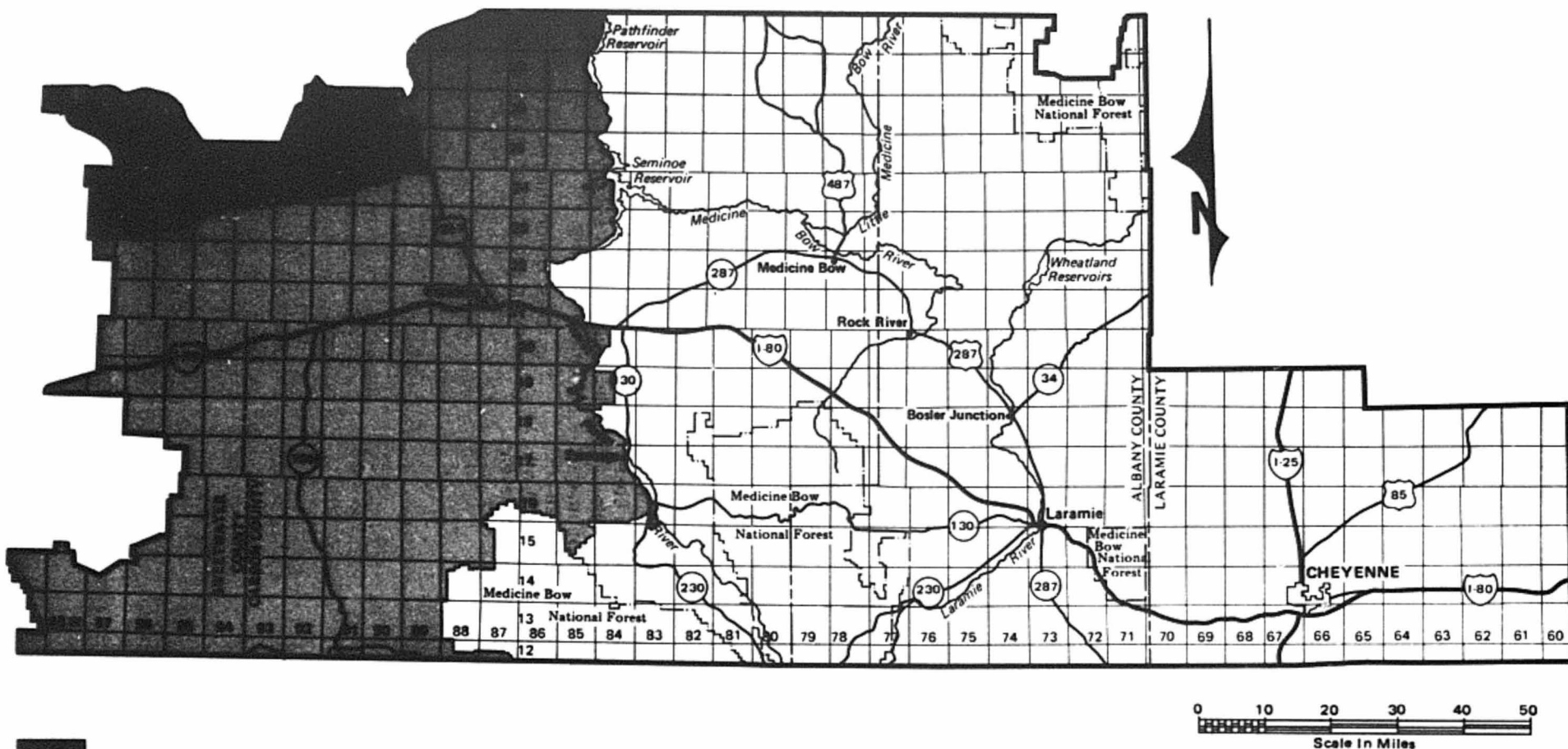
Requests for changes in seasons of use or kind of livestock will be considered case by case. Requests for conversions from sheep to cattle will be considered with management actions to maintain or improve riparian conditions.




Any adjustments in livestock grazing use will be consistent with current policies and procedures and as a result of inventories, monitoring studies and consultation, coordination or negotiation with grazing permittees. Adjustments may also result from land use planning decisions to change the allocation of land uses or from transfers of BLM administered public lands to other agency jurisdictions or into non-federal ownership.

The Great Divide rangeland monitoring plan will be reviewed and updated annually. This monitoring plan, which details the type and purpose of monitoring to be done at the allotment level is on file in the Great Divide Resource Area Office. The Wyoming minimum monitoring standards are shown in Table 2.

Grazing systems will be designed to achieve the livestock grazing objective. Existing allotment management plans, (AMPs) will be maintained and updated as necessary. New AMPs will be developed for selected grazing allotments as funding allows. "I" allotments have first priority.

Existing types and levels of grazing use will be continued in "M" allotments. Proposals to change existing use may require changes in the allotment categorization and level of management attention and monitoring. Maintenance and development of range improvements may be undertaken to enhance



-  Seven Lakes Grazing EIS Area
-  Divide Grazing EIS Area
-  Medicine Bow Grazing EIS Area

Map 15
GRAZING EIS AREAS
 Great Divide Resource Management Plan
 November, 1990

RESOURCE MANAGEMENT PLAN

TABLE 2
MINIMUM MONITORING STANDARDS

ELEMENT	CATEGORY			
	HIGH	LOW	M	C
Actual Use	Annually	Annually	— ¹	—
Climate	Annually	Annually	(Allotment supervision visit 1 year in 5)	(Allotment supervision visit as manpower allows)
Utilization	Annually (Includes allotment map of utilization)	1 year in 5 (Includes allotment map of utilization)		
Trend (Permanent Photo-Point)	Yes	Yes	Optional	—
Trend (Other)	Discretion of Area Manager	—	—	—
Allotment Management Plan	Draft AMP by end of 5 years	—	—	—

¹ A dash (—) signifies no minimum standard.

multiple-use values. Private investment will be encouraged and authorized when consistent with the multiple-use objectives for the allotment.

Grazing use in "C" allotments will continue at present levels. Proposals for changes in use will be reviewed and allowed if they do not conflict with other values. Private investment in range improvements will be allowed when it does not conflict with multiple-use of the public land in the allotment.

Management Actions Specific to the Medicine Bow Grazing EIS Area

Livestock grazing will continue to be excluded from the Pennock Mountain Wildlife Habitat Area (6,285 acres), the Wick Wildlife Habitat Area (320 acres), the Laramie Peak Wildlife Habitat Area (2,858 acres), and the Sybille Wildlife Research Unit (680 acres). A grazing agreement has been negotiated in the Split Rock/Duck Creek Agreement Area (1760 acres) which accommodates the special needs of the Bighorn Sheep using the area for lambing.

A projected 1,725 acres of riparian habitat will be the object for development of grazing treatments. Special riparian needs will be the primary consideration in the location and design of range improvements and grazing systems in these areas. If necessary, livestock use will be excluded from riparian areas until they improve sufficiently to support limited seasonal grazing.

Special attention will be given to maintenance of wildlife habitat on 13,140 acres that contain crucial winter range for big game and other important habitat. These areas will also receive special attention in the development and implementation of AMPs and other activity plans (see Maps 16, 17, and 18).

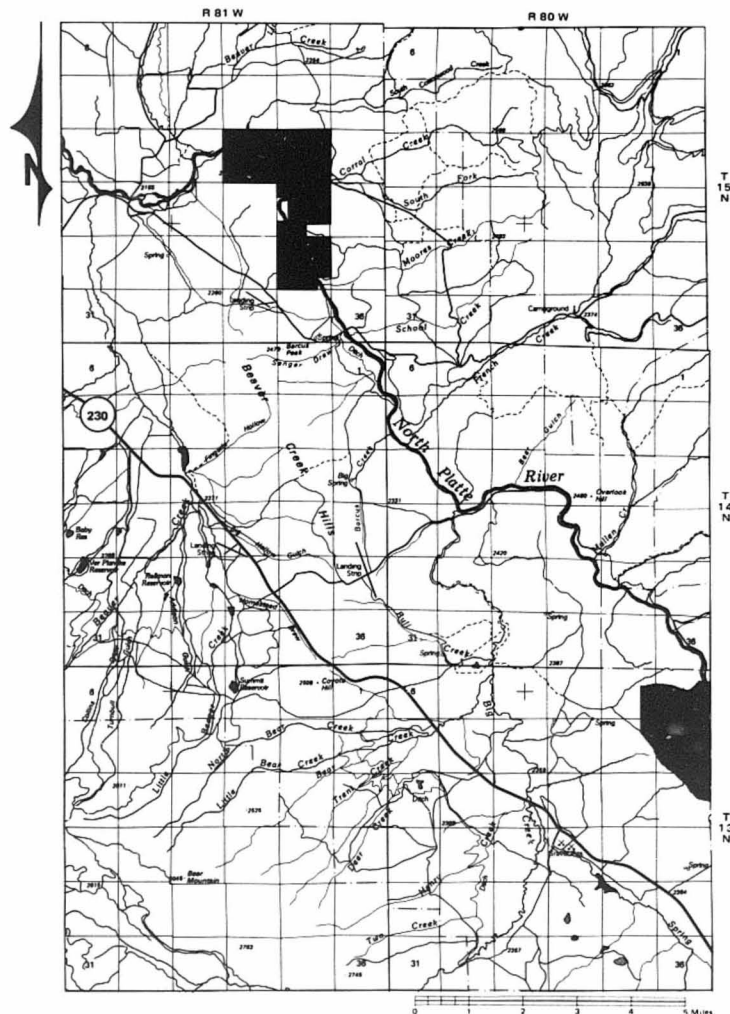
Minerals Management Decisions

Leasable Minerals

Coal

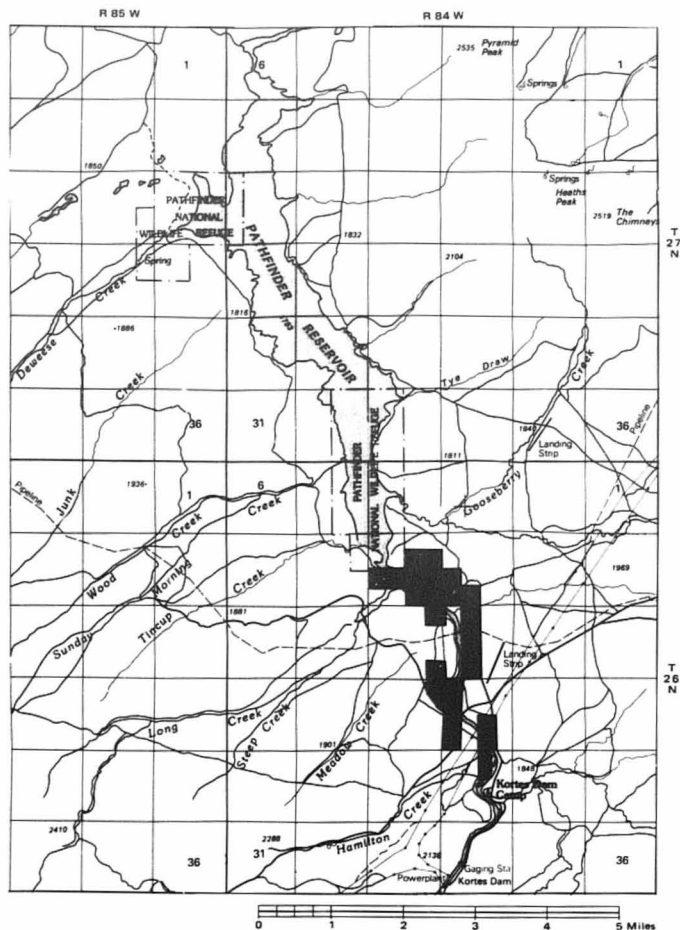
Management Objectives To provide for both short- and long-range development of federal coal in an orderly and timely manner, consistent with the policies of the federal coal management program, environmental integrity, national energy needs, and related demands; to protect important resources by specifying whether federal coal can be leased for surface, subsurface, or in situ mining methods; and to allow analysis of alternative areas in consideration of future leasing activities.


Management Actions The federal coal areas with potential for coal development are shown on



Map 16
IMPORTANT WILDLIFE HABITATS IDENTIFIED
FOR SPECIAL LIVESTOCK GRAZING MANAGEMENT
BENNETT PEAK AND PROSPECT MOUNTAIN
Great Divide Resource Management Plan
November, 1990

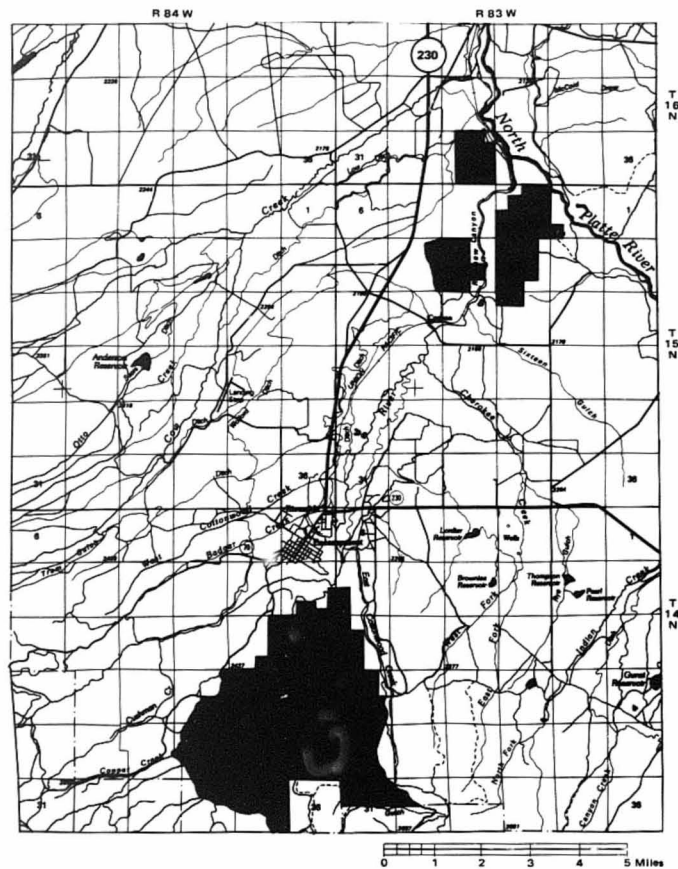
Livestock grazing could occur on both areas with special attention for maintenance of wildlife habitat.




 Livestock grazing could occur on this area with special attention for maintenance of wildlife habitat.

Map 17
 IMPORTANT WILDLIFE HABITATS IDENTIFIED
 FOR SPECIAL LIVESTOCK GRAZING MANAGEMENT
 MIRACLE MILE
 Great Divide Resource Management Plan
 November, 1990

28



 Livestock grazing could occur on both areas with special attention for maintenance of wildlife habitat.

Map 18
 IMPORTANT WILDLIFE HABITATS IDENTIFIED
 FOR SPECIAL LIVESTOCK GRAZING MANAGEMENT
 ENCAMPMENT RIVER CANYON
 Great Divide Resource Management Plan
 November, 1990

29

RESOURCE MANAGEMENT PLAN

Map 19. Those areas acceptable for further consideration for leasing (through lease applications or coal activity planning) are listed below. The mitigative measures developed in the coal screening process will be applied in these areas as described in Appendix II. All other federal coal areas within the planning area are unavailable for leasing consideration.

Federal coal areas acceptable for further leasing consideration:

Hanna Basin—About 29,280 acres of public land and 780 acres of split estate lands containing about 190.6 million tons of Federal coal.

North Indian Springs—About 3,840 acres of public land containing about 25.0 million tons of Federal coal (acceptable for leasing consideration only for in situ coal development).

Indian Springs—About 2,500 acres of public land containing about 25.0 million tons of Federal coal (acceptable for leasing consideration only for in situ coal development).

Red Rim—About 9,720 acres of public land containing about 40.6 million tons of Federal coal.

China Butte—About 6,240 acres of public land containing about 73.9 million tons of Federal coal.

Atlantic Rim—About 2,850 acres of public land and 800 acres of split estate lands containing about 79.1 million tons of Federal coal.

Development Sequence:

A north-to-south coal development sequence will be followed in the entire area west of Rawlins and south of I-80 as needs are identified.

The BLM will process all applications for leasing in areas identified as acceptable for further consideration for coal leasing. For each application, BLM will conduct a site-specific environmental analysis and will consider the development sequence described above and other environmental and socioeconomic factors (see Appendix II).

Savery Preference Right (coal) Lease Applications (PRLAs)—Serial Numbers WYW-0324034, 35, 36, 38, 41, 42

Development of the federal coal in the Savery PRLA area will not be allowed and no further consideration will be given to federal coal leasing in the area.

While the Great Divide proposed RMP/Final EIS was being printed (August 1988), the final showing for the Savery PRLAs, submitted by the applicant, was determined by BLM to be inadequate and the applications were rejected. Lacking any contest of this action by the applicant, the Sav-

ery PRLA case files (the only PRLAs in the Great Divide planning area) were closed. Thus, there is no longer any potential for PRLAs to influence the above decided north-to-south coal development sequence in the planning area.

In considering the Savery PRLA area for inclusion in the competitive federal coal leasing process, it was determined that the federal coal in the area has no development potential. The reasons for lacking development potential are the same as those explained in Appendix II (i.e., under the Coal Planning Process, Step 1: Identification of Development Potential Coal). In addition, the Record of Decision for the Savery Coal EIS (BLM, 1985) adopted the no (coal) development alternative for the Savery PRLA area because the significant resource impacts and land use conflicts that would result could not be acceptably mitigated. That situation has not changed and the no development decision is still appropriate for the foreseeable future.

Oil and Gas

Management Objective To provide opportunity for leasing, exploration, and development of oil and gas while protecting other resource values.

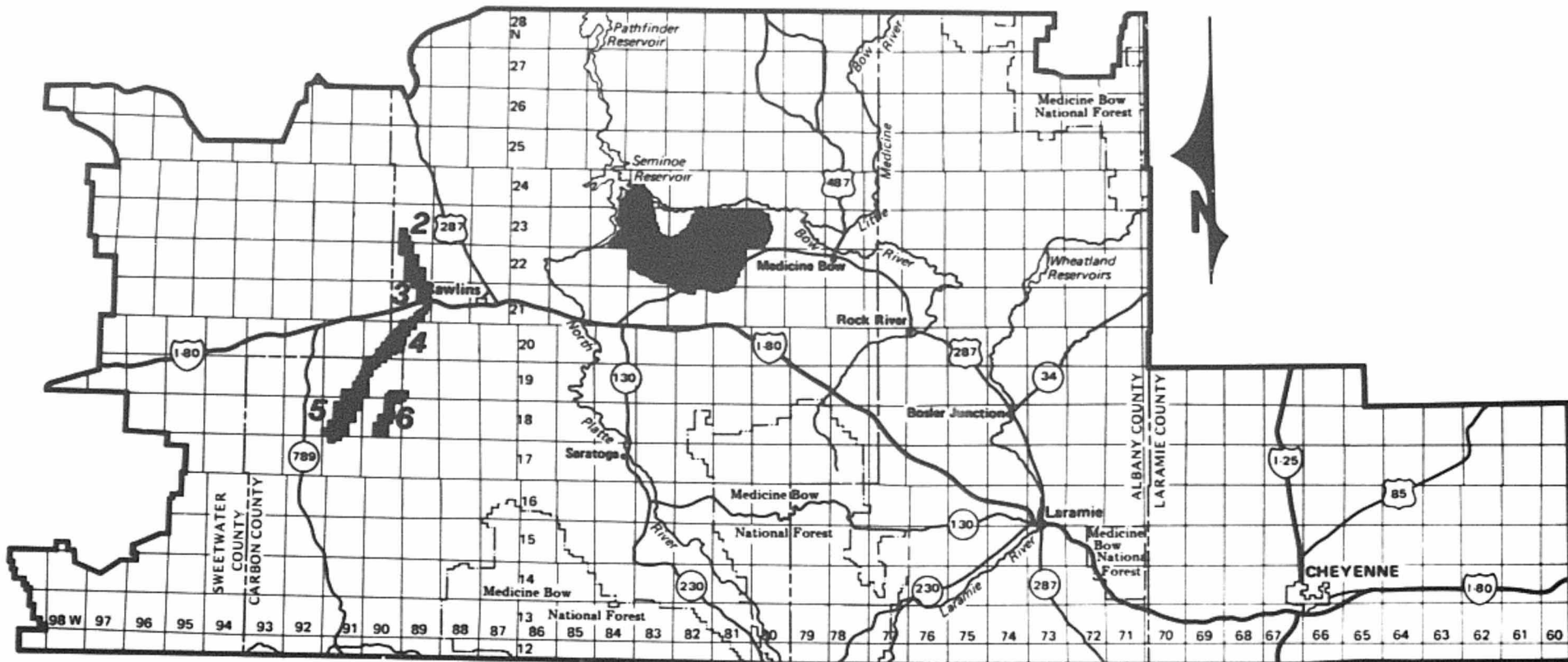
Management Actions The entire planning area is open to oil and gas leasing. Leases will be issued with needed restrictions to protect the resources listed in Table 3.






Surface-disturbing activities will be restricted and intensively managed to maintain important resource values in the ACECs, the Baggs Elk Crucial Winter Range, and in overlapping crucial winter ranges for the various big game species. (See the individual ACEC and wildlife sections.)

All lands that are open to oil and gas leasing are also open to geophysical exploration.

In cases where Federal oil and gas leases are or have been issued (1) without stipulated restrictions or requirements that are later found to be necessary; or (2) with stipulated restrictions or requirements that are later found to be insufficient; the needed restrictions or requirements may be included in approving subsequent exploration and development activities. These restrictions or requirements may only be included as reasonable measures or as conditions of approval (COA) in authorizing applications for permit to drill (APD), sundry notices, or plans of development (POD).

Conversely, in cases where leases are or have been issued with stipulated restrictions or require-



-  Hanna Basin
-  North Indian Springs
-  Indian Springs
-  Red Rim
-  China Butte

 Atlantic Rim

31

Map 19
AREAS WITH POTENTIAL FOR COAL DEVELOPMENT
 Great Divide Resource Management Plan
 November, 1990

RESOURCE MANAGEMENT PLAN

TABLE 3
ACREAGES WITH SEASONAL AND SURFACE
DISTURBANCE RESTRICTIONS

TYPE OF AREA	ESTIMATED ACREAGE
Steep Slopes	320,000
Riparian areas and/or perennial surface water	140,000
Historic trails	43,000
VRM Class I and Class II areas	194,000
Existing and proposed recreation sites	560
North Platte River SRMA (¼ mile on either side of the river)	3,550
Sage grouse leks	22,900
High priority wildlife habitat	240,000
Raptor concentration areas (see map 8)	60,000
Baggs crucial winter range for elk	79,000
Overlapping big game crucial winter range	122,880

NOTE: The above acreages are estimates based on the best available information and may not include all reasons for the restrictions. They are intended to give the reader a concept of the area involved. Some acreages may overlap. Seasonal restrictions, to protect wildlife during critical periods, will be applied to about 1.4 million acres. This acreage includes raptor concentration areas, sage grouse and sharp-tailed grouse nesting habitat, and big game crucial winter range and birthing areas. It overlaps with some of the acreages listed above.

ments that are later found to be excessive or unnecessary, the stipulated restrictions or requirements may be appropriately modified, excepted or waived in authorizing APDs, sundry notices, or PODs.

NOTE: Both the application of reasonable measures or COAs and the modification, exception or waiver of stipulated restrictions or requirements must first be based upon site specific analysis of individual APDs, sundry notices, or PODs, including the necessary supporting NEPA documentation.

Other Leasable Minerals

Management Objective To provide opportunity for leasing, exploration, and development of oil shale, geothermal resources, and nonenergy leasable minerals while protecting other resource values.

Management Actions The entire planning area is open to leasing of oil shale, geothermal resources, and nonenergy leasable minerals.

Lease applications will be considered on a case-by-case basis. Stipulations to protect important surface values will be based on interdisciplinary review of individual proposals and environmental analysis.

Locatable Minerals

Management Objective

To provide opportunity for location of mining claims and mineral development while prohibiting such activities on lands that are not compatible with these types of activities.

Management Actions

The entire planning area is open to location of mining claims and mineral development except for areas that are closed or to be closed and withdrawn from mineral location. These areas are shown in Table 1.

All locatable minerals actions will be reviewed to assure compliance with the BLM bonding policy for surface disturbing activities.

Salable Minerals

Management Objective

To provide availability of mineral materials in convenient locations for users while protecting surface resources.

RESOURCE MANAGEMENT PLAN

Management Actions

The planning area is open to the sale of mineral materials.

Sales will be considered on a case by case basis. Stipulations to protect important resource values will be based on interdisciplinary review and analysis of individual proposals.

Recreation Management Decisions

Management objectives

To ensure the continued availability of outdoor recreational opportunities, to meet legal requirements for the health and safety of visitors and to mitigate conflicts with other resource uses.

Management Actions

Recreation Areas and Sites

Existing Sites Maintenance of existing developed and undeveloped recreation sites will be continued.

Existing activity plans for the Nine Mile Hill and Big Creek sites will be revised before implementation.

New Sites Priority for development of new recreation sites will be as follows: (1) a boat launch and a picnic area at Prospect Creek, (2) a recreation site at Jeim Mountain, and (3) a recreation site in the Shirley Mountains. (See Map 20). Additional sites will be considered for development in the future as opportunities arise.

Special Recreation Management Areas

The designated special recreation management areas (SMRAs) are shown on Map 21. These areas will be managed as follows:

Continental Divide National Scenic Trail SRMA This SRMA covers 80 miles of trail through BLM-administered public land. The area will be managed to provide opportunities for trail users to view the diverse topographic, geologic, vegetative, and scenic phenomena and wildlife that characterize the Continental Divide and to observe examples of human use of the natural resources.

The exact trail route will be identified through activity planning, which also will determine where easements or rights-of-way will be needed on private or state-owned land.

North Platte River SRMA This 3,550-acre SRMA will be managed to provide high-quality recreational opportunities, especially for boating, fishing, camping, and sightseeing.

Management also will be aimed at providing public facilities and continued access.

Surface-disturbing activities within ¼ mile on either side of the river will be restricted to maintain the quality of the visual resources. An activity plan has been written for a portion of this area. That plan will be revised to include the entire SRMA.

Shirley Mountains Cave SRMA This 24,800-acre SRMA will be managed to provide for protection and enjoyment of the cave system while other resource uses will be allowed aboveground (see Map 22). Specific recreation management guidelines and surface use guidelines will be developed during activity planning.

Off-Road Vehicle Management

An ORV implementation plan will be prepared for the resource area. More details on off-road vehicular use and management will be developed in this implementation plan.

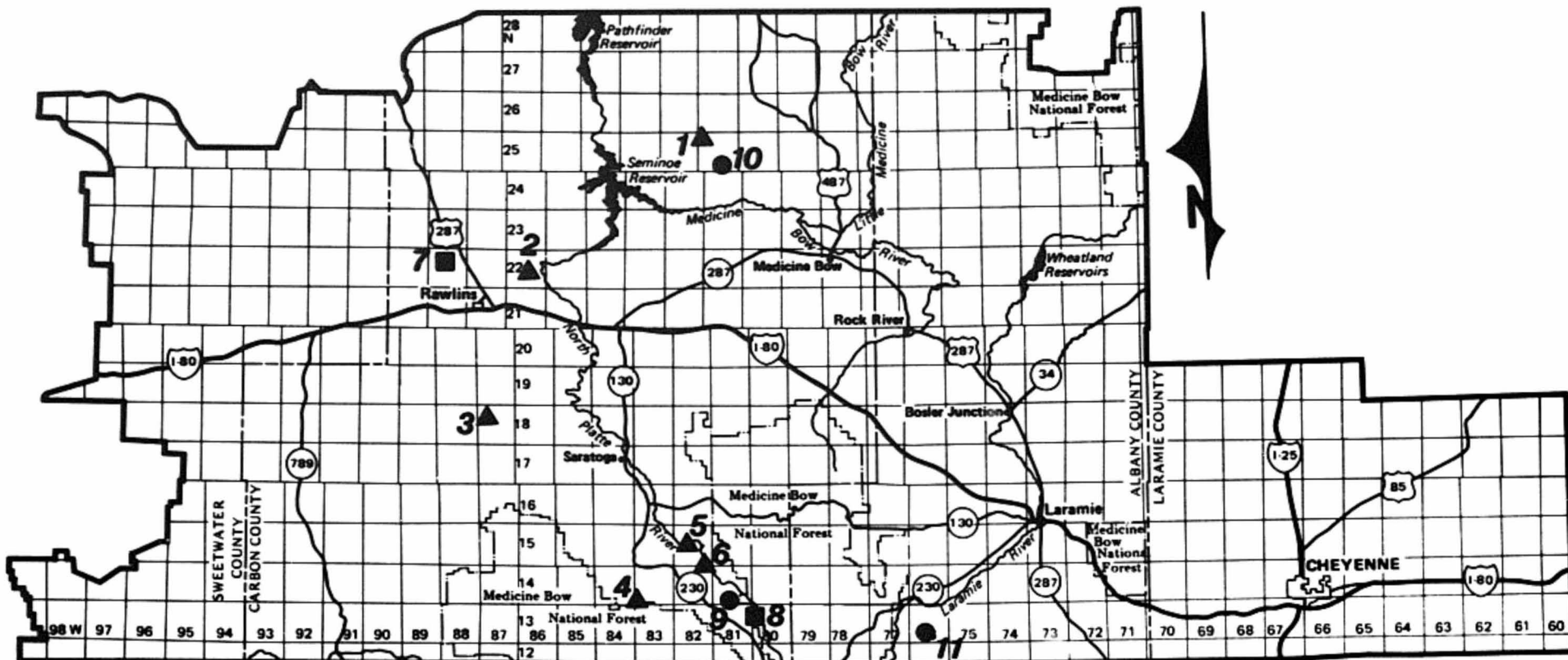
The BLM will coordinate and cooperate with owners of adjacent properties, interested individuals, organizations, and agencies in preparing plans for implementation of the following ORV designations (also see Map 23).

General Planning Area With some exceptions, the planning area is open to use of motorized over-the-snow vehicles, provided that they do not adversely affect wildlife or vegetation. With some exceptions, all other motorized vehicle use in the planning area is limited to existing roads and trails. These exceptions are:

- Pennock Mountain and Wick Wildlife Habitat Areas (crucial elk winter range - about 10,126 acres).

These areas are closed to motorized vehicle use, including over-the-snow vehicles, from November 15 to April 30.

- Encampment Canyon crucial big horn winter range (about 6,700 acres)



▲ DEVELOPED RECREATION SITES

- 1** Pryor Flat
- 2** Dugway
- 3** Teton Reservoir
- 4** Encampment River
- 5** Bennett Peak
- 6** Corral Creek

■ UNDEVELOPED RECREATION SITE

- 7** Nine Mile Hill
- 8** Big Creek

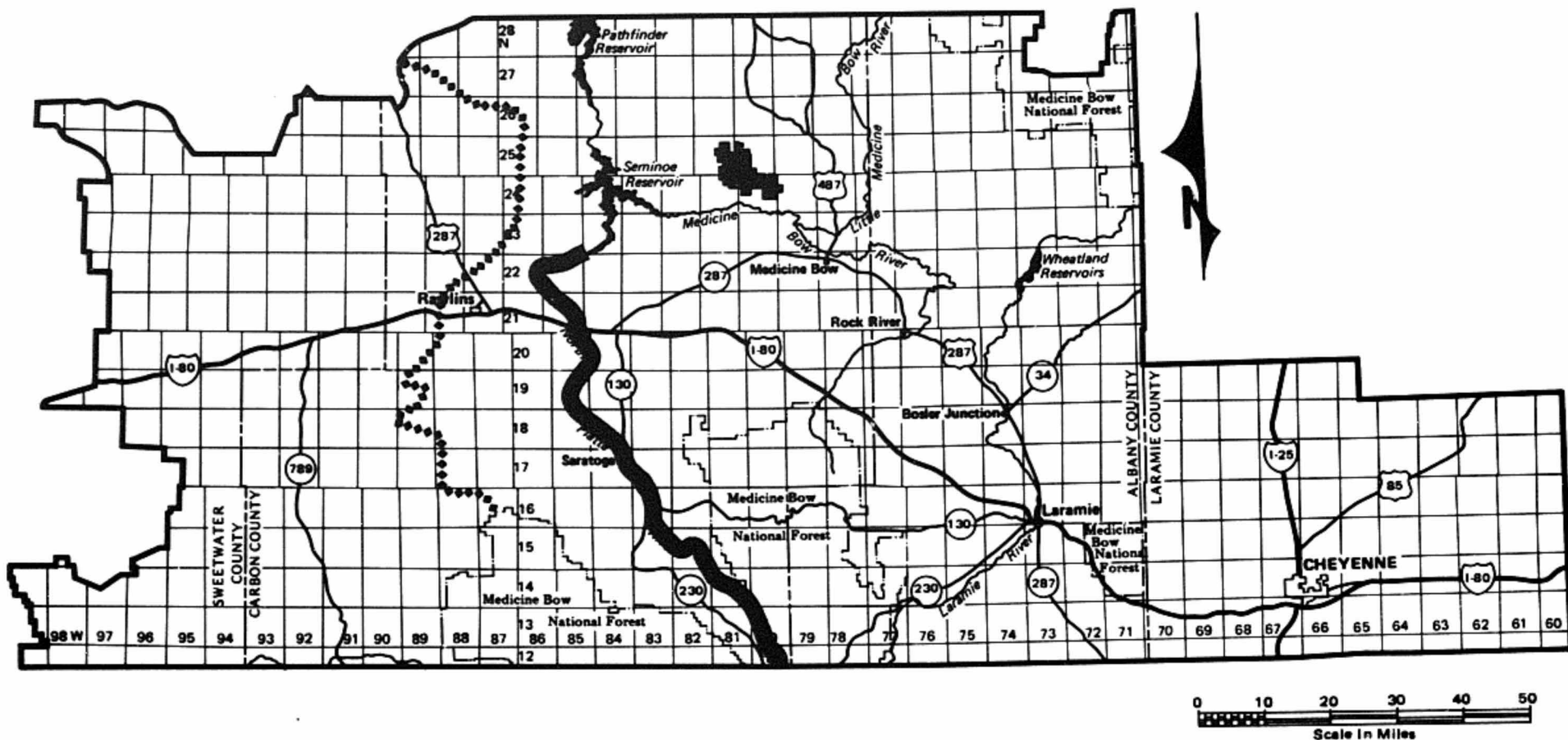
● PROPOSED RECREATION SITE

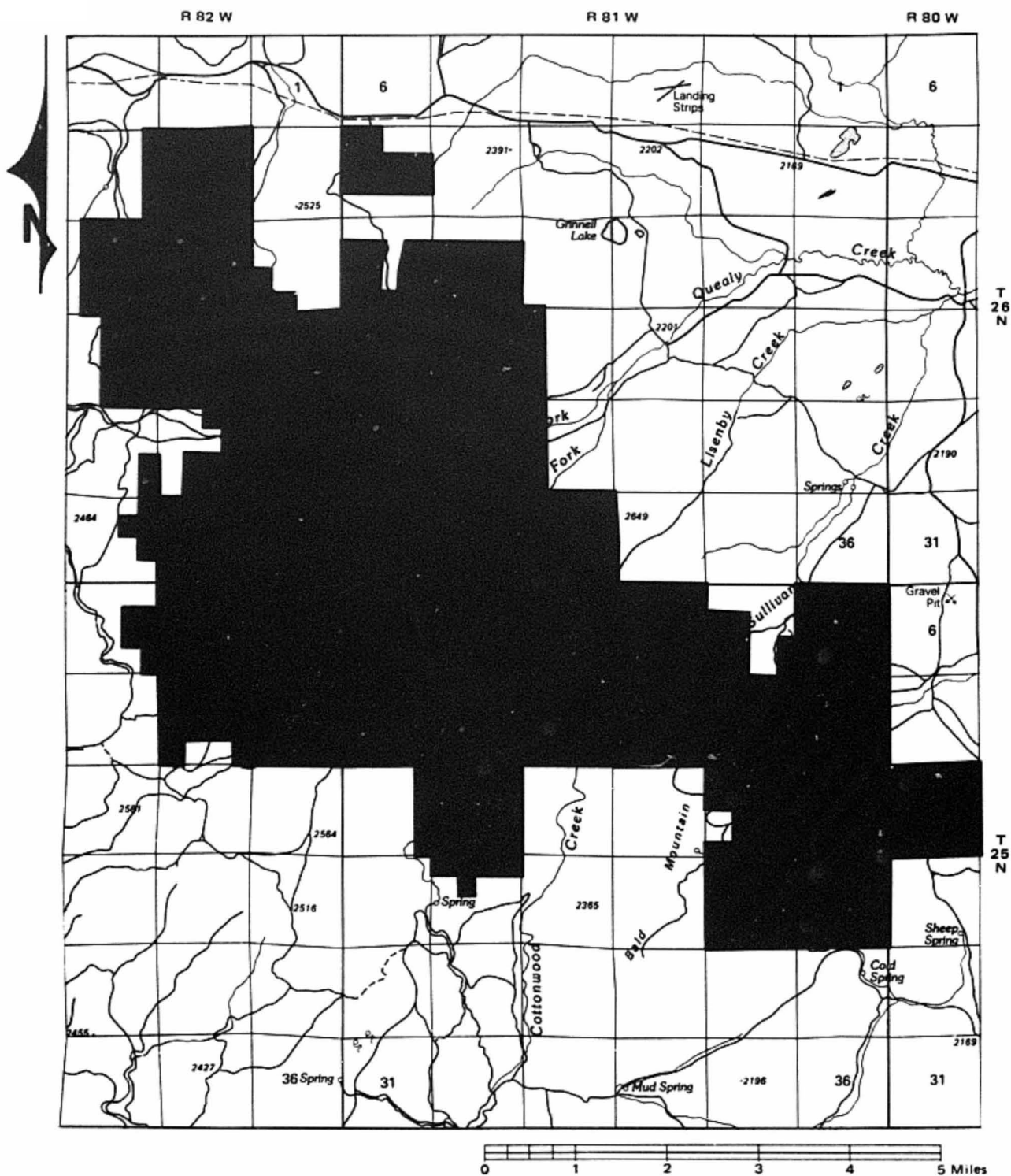
- 9** Prospect Creek
- 10** Shirley Mountains
- 11** Jelm Mountain



**Map 20
RECREATION SITES
Great Divide Resource Management Plan
November, 1990**

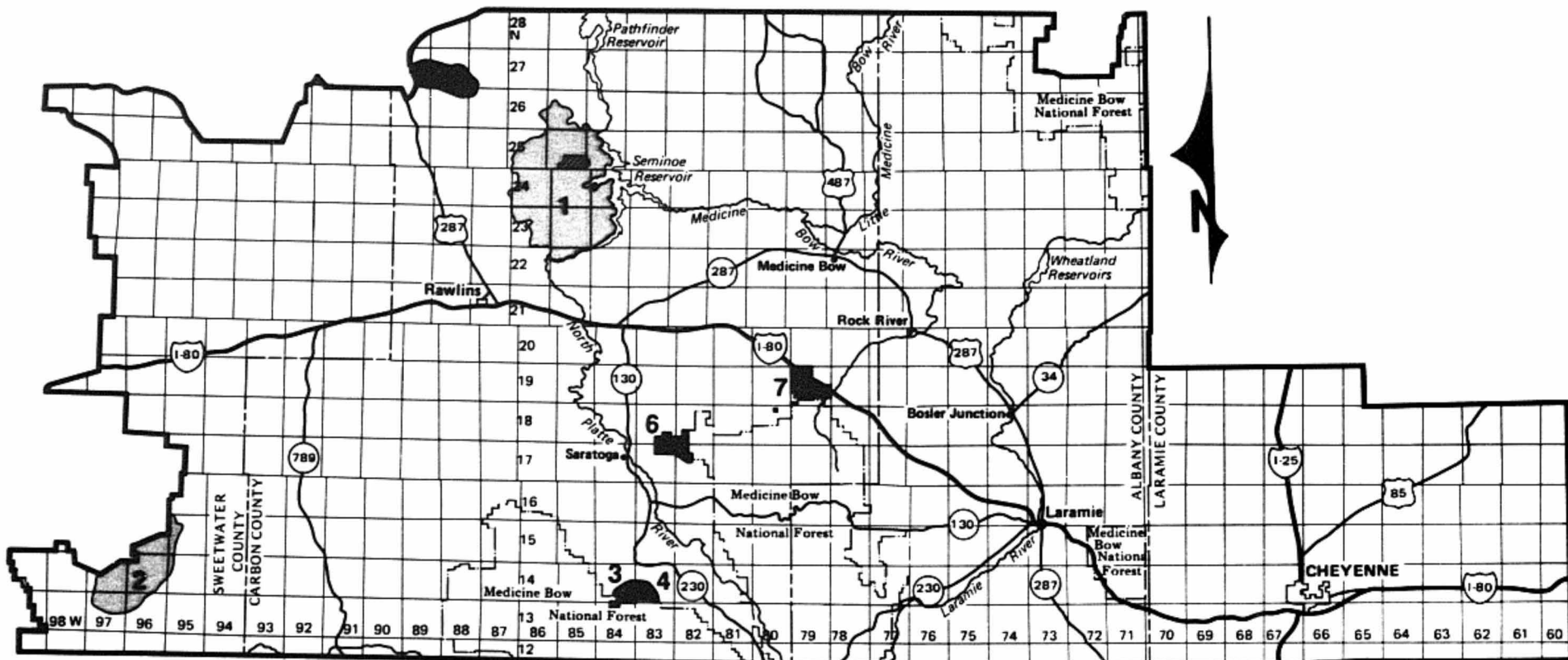
34











 Special Management Area

Map 22
SHIRLEY MOUNTAINS CAVES
SPECIAL RECREATION MANAGEMENT AREA
 Great Divide Resource Management Area
 November, 1990



-  ORV Travel Limited to Open Sand Areas West of the Highway and Existing Roads and Trails
-  ORV Travel Limited to Designated Roads and Trails
-  Closed to ORVs from Dec 1 - April 30
-  Closed to all Vehicles from Nov. 15 - April 30
-  Closed to all Vehicles Yearlong
-  ORV Travel Limited to Existing Roads and Trails

- 1 West Seminoe and Dune Ponds
- 2 Adobe Town (See Adobe Town-Ferris Mtns. Wilderness FEIS)
- 3 Encampment River Canyon (See Great Divide Wilderness FEIS)
- 4 Encampment River Trail (See Great Divide Wilderness FEIS)
- 5 Ferris Mountains (See Adobe Town-Ferris Mtns Wilderness FEIS)
- 6 Pennock Mountains Wildlife Habitat Area
- 7 Wick Brothers Wildlife Habitat Area



Map 23
OFF-ROAD VEHICLE DESIGNATIONS
Great Divide Resource Management Plan
November, 1990

RESOURCE MANAGEMENT PLAN

This area is closed to motorized vehicle use, including over-the-snow vehicles, from December 1 to April 30.

- Encampment River Trail

Those portions of this trail that cross BLM administered public lands are closed to all types of motorized vehicle use, year-round.

- Dune Ponds Cooperative Management Area (3,240 acres)

Motorized vehicle use is limited to open sand areas west of Carbon County Road 351 and to existing roads and trails in the rest of the area.

- West Seminoe Area (99,162 acres)

Motorized vehicle use will be limited to designated roads and trails to help resolve resource conflicts and preserve public access.

- Ferris Mountains

This area is closed to all types of motorized vehicle use, year-round (see Adobe Town/Ferris Mountains Wilderness Final EIS).

- Adobe Town

Motorized vehicle use will be limited to designated roads and trails (see Adobe Town/Ferris Mountains Wilderness Final EIS).

Specific Problem Areas Plans for rehabilitation or mitigation of ORV use will be developed and implemented for specific problem areas within the Sand Hills area and the Dune Ponds Cooperative Management Area.

Because of the mixed landownership pattern and multiple resource concerns, completion of an effective ORV implementation plan for the Dune Ponds area is entirely dependent on close coordination with private land owners of adjacent property, the Wyoming State Land Board, Wyoming Game and Fish Department, and other interested parties. The plan will also be closely coordinated with the wildlife, soils, and livestock grazing programs to ensure multiple resource concerns are addressed.

Access to Recreation Areas

Consistent with the Wyoming BLM access policy, the BLM will pursue opportunities to acquire legal access to certain areas to ensure continued availability of outdoor recreational opportunities. See Lands Program - Access section for the areas needing access.

Consolidation of Landownership

Consolidation of landownership will be pursued in the following areas to increase recreational opportunities for the public. The areas in order of priority are: High - Bennett Peak, Dugway, Miracle Mile, North Platte River area; moderate - Dune Ponds, Elk Mountain, Shirley Mountains caves; and low - Bennett Mountains, Encampment River Canyon, Ferris Mountains. The preferred method of consolidation is through exchange.

Sensitive Plants Management Decisions

Gibben's Beardtongue Site (about 10 acres)

Management Objective

To maintain or enhance the population of Gibben's beardtongue (*Penstemon gibbensii*) in the site area.

Management Actions

The known population of Gibben's beardtongue will be protected from disturbance by maintaining the fencing around the population and by intensively managing surface disturbing activities in adjacent areas that could affect the population. Case by case examination of any proposed surface disturbing activity will be made to determine potential adverse effects and appropriate mitigation to minimize those effects. Developments, uses and facilities will be managed temporally and spatially to avoid damage to the sensitive plant species.

Established trend studies will be continued.

BLM intends to close this area to mineral location. A withdrawal will be initiated to implement this closure.

Muddy Gap Cushion Plant Community (about 100 acres)

Management Objective

To maintain or enhance the population of the Muddy Gap Cushion Plant Community.

RESOURCE MANAGEMENT PLAN

Management Actions

Notices will be required for locatable mineral exploration and development (except casual use) consistent with regulations. A plan of operations will be required for disturbance of more than 5 acres.

The BLM will coordinate management of the plant community with The Nature Conservancy. If a need for protective measures is indicated, they will be taken to protect the plant community.

Persistent Sepal Yellowcress

Management Objective

To maintain or enhance the population of persistent sepal yellowcress (*Rorippa calycina*).

Management Actions

The planning area contains fifteen known populations of the persistent sepal yellowcress (*Rorippa calycina*) plant which has been proposed for threatened or endangered status. Some of this is on land administered by the Bureau of Reclamation (BuRec); therefore, the BLM will coordinate with BuRec to manage populations of persistent sepal yellowcress. In addition, the BLM will coordinate with county weed and pest control districts to ensure that populations of the plant are not affected by weed control programs. Since locations and degree of occurrence of this plant are extremely unstable, no acreage estimates have been attempted. Occurrence fluctuates with high and low reservoir or stream water lines.

Soil, Water, and Air Management Decisions

Management Objectives

To prevent the deterioration of air quality beyond applicable local, state, or federal standards and to enhance air resources where practicable.

To prevent impairment of important scenic values that may be caused by declining air quality.

To maintain soil cover and productivity where they are adequate and to increase soil cover and productivity where they are in a downward trend.

To maintain riparian areas in good or excellent condition and to improve riparian areas that are in fair or poor condition.

To control flood and sediment damage from natural or human-induced causes.

To reduce salt loading in watersheds that lie within the Colorado River Basin.

To meet or exceed established standards for quality of surface water and groundwater where water quality has been lowered by human-induced causes.

To provide for physical and legal availability of water for use by the public and by federal, state, and local agencies for fisheries and wildlife and for livestock, recreational, municipal, and industrial uses.

Management Actions

The BLM will implement intensive land-use practices to mitigate salt and sediment loading caused by surface-disturbing activities. These practices will be carried out in the following areas in priority order: (1) Muddy Creek, (2) Sage Creek, (3) Second and Third Sand creeks, and (4) the Little Snake River Basin (excluding the Muddy Creek watershed). Watershed or other activity plans will address site specific problems and will include monitoring for salt and sediment loading.

In other areas, the BLM will carry out watershed management practices designed to meet soils, water, and air resource management objectives. These practices will be included in activity plans such as AMPs and HMPs.

Surface disturbing activities will be prohibited on unstable areas unless it can be demonstrated that the instability can be alleviated. Specific unstable areas such as landslides, slumps, and areas exhibiting soil creep will be identified individually.

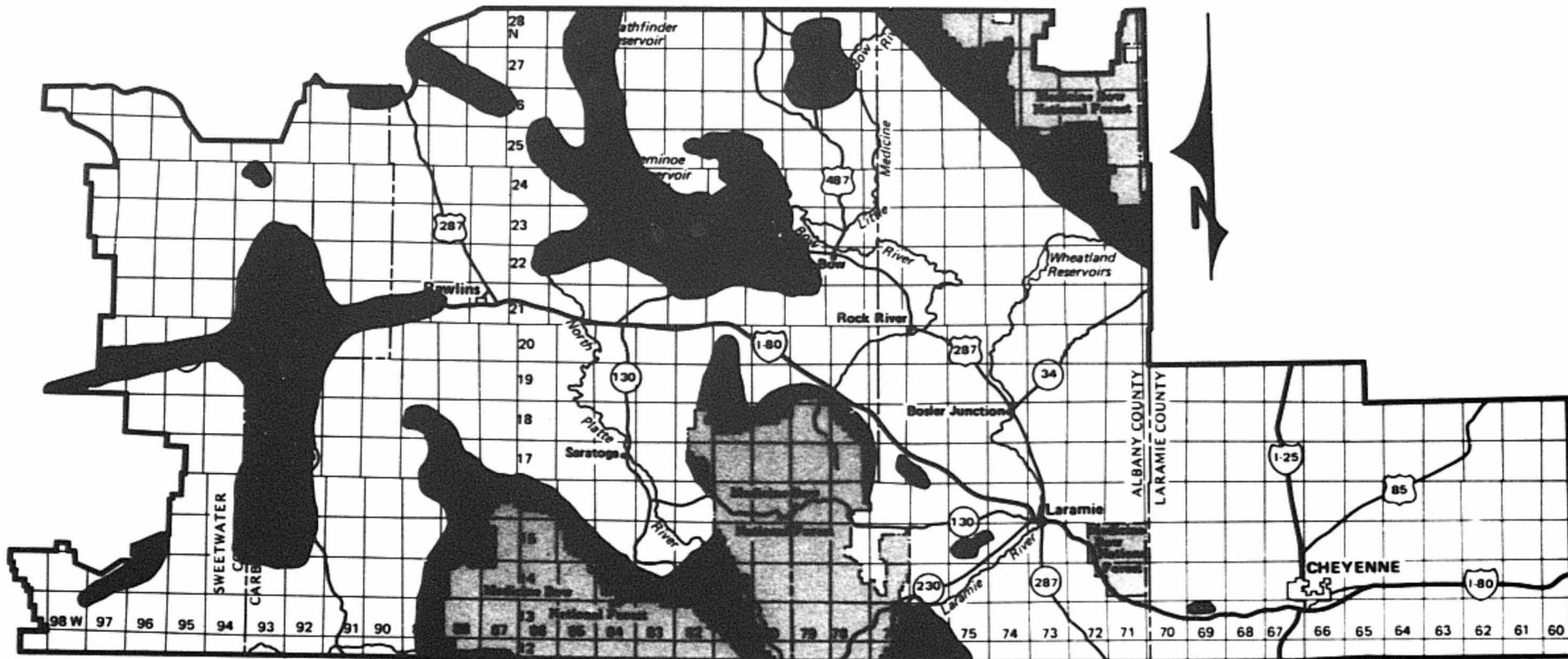
Visual Resource Management Decisions

Management Objective

To minimize adverse effects on visual resources while maintaining the effectiveness of land-use allocations.

Management Actions

The planning area will be managed according to visual resource management (VRM) classes as follows: Class I, 33,165 acres; Class II, 160,640 acres; Class III, 3,582,195 acres; Class IV, 224,000 acres (See Map 24).



- Class I
- Class II
- Class III
- Class IV
- USFS Land - Not included in any VRM Class



Map 24
VISUAL RESOURCE MANAGEMENT CLASSES
Great Divide Resource Management Plan
November, 1990

40

RESOURCE MANAGEMENT PLAN

Wild Horse Management

Management Objectives

To protect, maintain, and control a viable, healthy herd of wild horses while retaining their free-roaming nature and to provide adequate habitat for free-roaming wild horses through management consistent with environmental protection and enhancement policies.

Management Actions

There are three wild horse herd management areas (WHHMA) within the resource area. They are the Adobe Town WHHMA, the Flat Top WHHMA, and the Seven Lakes WHHMA (see Map 25). Each of these areas is covered by a herd management area plan (HMAP). Current management levels for these areas are Adobe Town, 300-500; Flat Top, 40-100; and Seven Lakes, 66-135. Monitoring in these areas is ongoing. Herd management levels for each area will be evaluated to determine whether they are at appropriate management levels as soon as sufficient monitoring data are available. At that time, the HMAPs will be revised if necessary.

Wildlife Habitat and Fisheries Management Decisions

Introduction

The 29 standard habitat types in the Great Divide Resource Area have been ranked by management priority into three categories. High priority habitat types, which usually support a large number of wildlife species, are not common in the planning area. Sound management is required to ensure maintenance or improvement of the vegetative composition and structure of moderate priority habitat types, which usually are of lesser importance to wildlife but are in greater supply than high priority types. In low priority habitat types, there is less vegetative diversity. Because of their abundance and lower wildlife value, these types can be more heavily used by conflicting resources without significant wildlife impacts.

Management Objectives - General

To provide habitat quality (food, cover, space, and water) adequate to support a natural diversity of wildlife and fisheries, including big game, upland game, waterfowl, non-game species, game fish, sensitive,

threatened, and endangered species, species of special management interest in Wyoming, as well as to assist in meeting goals of recovery plans.

To maintain or improve vegetation condition and/or avoid long-term disturbance in high priority standard habitat sites and fisheries areas.

To maintain or improve overall ecological quality, thus providing good wildlife habitat, within the constraints of multiple-use management in moderate and low priority standard habitat sites (see Table 4).

Management Actions

Habitat Management Areas

There will be 16 habitat management areas:

Six existing HMP areas: Baggs, Encampment/Bighorn Sheep, Ferris/Seminole, Red Desert, Sage Creek, and Shirley Mountains.

Five new HMP areas (of which one will be an addition to an existing area): Jelm Mountain, Laramie Peak, Sage Creek (addition), Saratoga Valley, and South Desert.

Five existing cooperative management agreement areas: Laramie Peak, Pennock Mountain, Wick, and Chain Lakes Wildlife Habitat Areas and the Sybille Wildlife Research Unit.

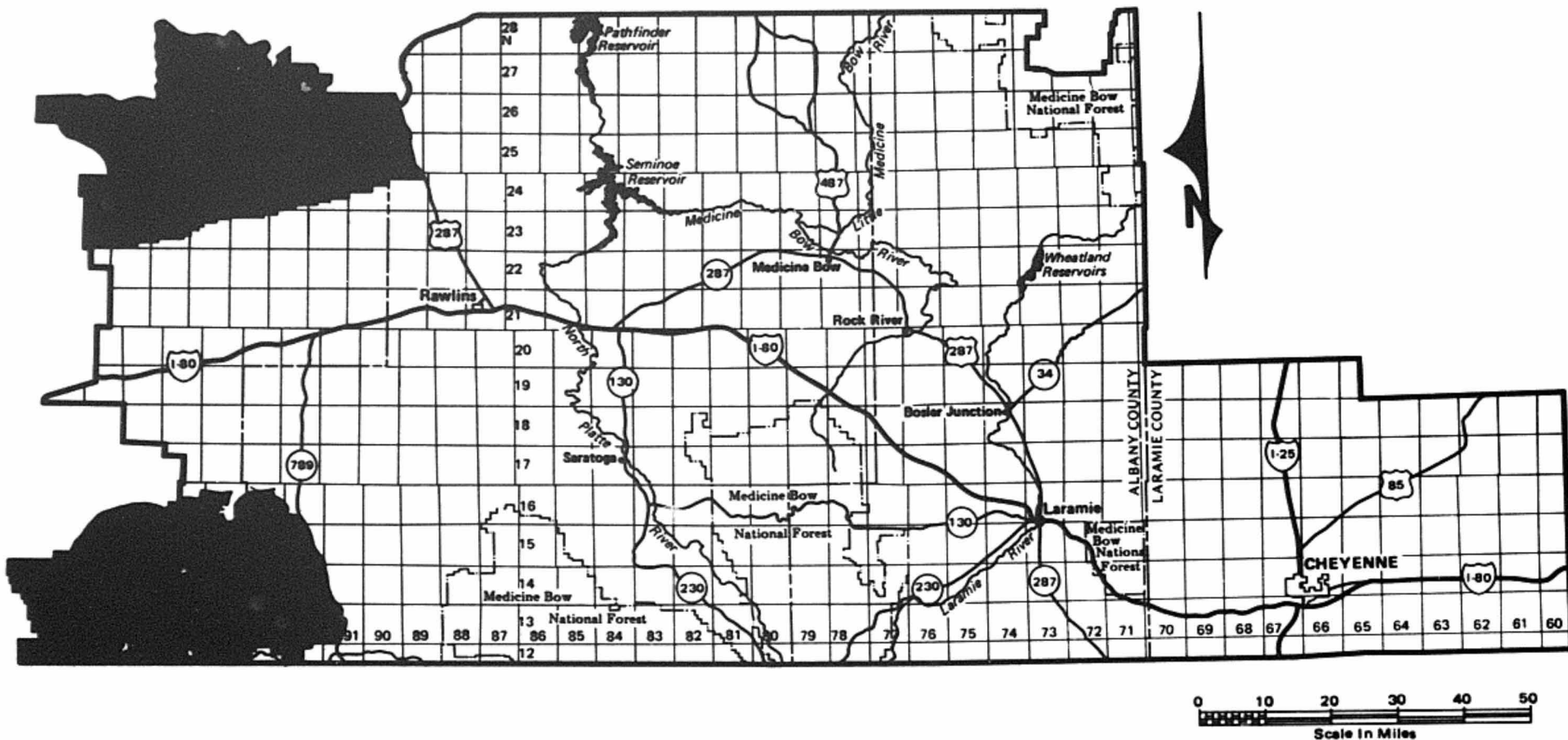
One new cooperative management agreement area: Dune Ponds (See ORV Management under Recreation Management Decisions).

Site specific management actions will be implemented in HMP areas and cooperative management areas to improve wildlife habitat. These site specific management actions will be identified in existing, revised, or proposed Habitat Management Plans (HMPs). These HMPs will also address transplants or augmentations of endemic wildlife species.

Wildlife and wildlife habitat inventory and monitoring will be implemented in all HMP areas, cooperative management areas and other portions of the planning area.

These inventories and monitoring studies will conform to Bureau policy and standards found in Bureau Manuals, Wyoming State Office Supplements and Wyoming Instruction Memorandums.

The estimated areas that will be involved in management actions in HMP areas are: 60 miles of streams (fisheries); 545 acres of reservoirs; 271,000 acres of raptor habitat; 243,000 acres of high priority habitat (including wetlands and riparian zone); and crucial winter range for big game species as follows: antelope, 375,000 acres; bighorn sheep, 23,000 acres; deer, 288,000 acres; elk, 153,000 acres.



- Seven Lakes Wild Horse Management Area
- Adobe Town Wild Horse Management Area
- Flat Top Wild Horse Management Area

Map 25
WILD HORSE HERD MANAGEMENT AREAS
 Great Divide Resource Management Plan
 November, 1990

42

RESOURCE MANAGEMENT PLAN

TABLE 4
RANKING OF STANDARD HABITAT TYPES

HIGH PRIORITY	MODERATE PRIORITY	LOW PRIORITY ¹
Open aquatic	Greasewood-sagebrush riparian	Short grasslands
Riparian grassland	Big sagebrush-rabbitbrush	Saltbush steppe
Willow-waterbirch riparian	Bitterbrush	Greasewood
Aspen riparian	Sagebrush-mixed grass	Badland
Cottonwood riparian	Silver sagebrush steppe	True sand dunes
Mountain shrub	Lodgepole pine	Upland meadows
Utah juniper	Limber pine	
Quaking aspen	Early successional conifer	
Aspen conifer	Rockland	
Ponderosa pine/Douglas-fir	Saline sub-irrigated grassland	
Platte Valley rockland		
Laramie Peak rockland		
Wet forested meadow		

NOTE: Ranking is based on the wildlife communities (total species, number of breeders, number of rare species) combined with the availability of each type.

¹ High priority habitats are those that require intensive-management actions (data collection, enhancement, protection) to maintain their productivity as diverse wildlife communities; moderate-priority habitats are those that require less intensive management to maintain their productivity as wildlife communities; low-priority habitats are those that can be more heavily used by conflicting resources so that the higher priority wildlife habitats can be maintained.

Raptor Concentration Areas

Management Objectives To manage resources so that productivity of nesting raptor pairs is maintained, while allowing for development of coal and oil and gas, and to seek the cooperation of owners of adjacent property in management of raptor nesting habitat.

Management Actions Surface-disturbing activities will be intensively managed in all RCAs to reduce physical disturbance of raptor habitat and disturbance of the birds. This will entail case by case examination of proposals to determine potential adverse effects and appropriate mitigation to minimize those effects. Certain times of the year and certain areas will be avoided by spatial and temporal management of development, facilities, and uses.

Oil and gas leasing will be allowed in the RCAs. Coal leasing will be allowed in those portions of RCAs found to be acceptable for further leasing consideration.

Most of the Atlantic Rim RCA is included in the Jep Canyon ACEC and the Shamrock Hills RCA is designated an ACEC. Refer to the ACEC section for discussion of management guidelines for these two RCAs.

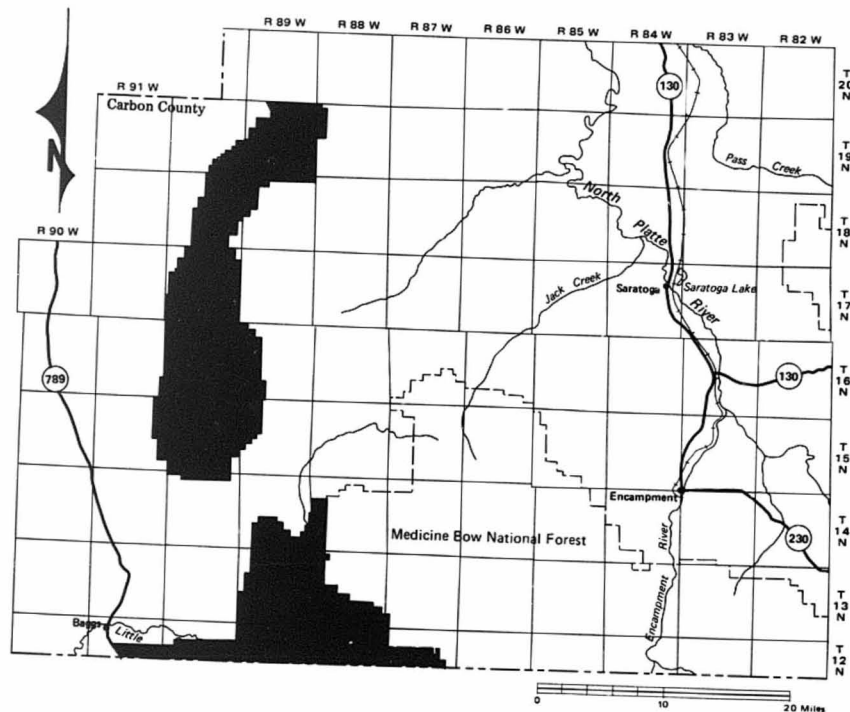
In the remaining RCAs, a notice will be required for locatable mineral exploration and development (except casual use) for disturbances of five acres or less; a plan of operations will be required for disturbances of more than five acres.

Baggs Crucial Elk Winter Range

A portion of the Baggs Crucial Elk Winter Range is included in the Sand Hills and Jep Canyon ACEC. See the ACEC section for details. Objectives and management actions for the remainder of the area follow.

Management Objectives The objectives for the Baggs Crucial Elk Winter Range are to maintain the integrity of crucial winter habitat for elk, to allow development of oil and gas and coal, and to seek the cooperation of owners of adjacent property in management of the habitat (see Map 26).

Management Actions Surface-disturbing activities will be intensively managed to prevent loss of significant elk winter habitat. This will entail case-by-case examination of proposals to determine potential adverse effects and appropriate mitigation to minimize those effects. Certain times of the year and



Map 26
BAGGS ELK CRUCIAL WINTER RANGE
Great Divide Resource Management Plan
November, 1990

RESOURCE MANAGEMENT PLAN

certain areas will be avoided by spatial and temporal management of development, facilities, and uses.

Oil and gas leasing will be allowed with application of surface protection measures as described above.

Plans of operations or notices will be required for locatable mineral exploration and development (except casual use) consistent with regulations. A plan of operations will be required for disturbances of more than 5 acres.

The BLM will cooperate with owners of intermingled or adjacent property to manage the habitat, coordinate efforts with the Wyoming Game and Fish Department (WGFD), and recommend managing elk population objective levels at a number supportable by the habitat.

White Pelican Island

Management Objective To maintain and enhance nesting habitat for a colony of white pelicans on the 12-acre island.

Management Actions The BLM will develop a cooperative agreement with the WGFD and BuRec for management of the pelican habitat on the island. Management actions will be carried out with the concurrence of BuRec.

The white pelican population will be monitored for disturbance and habitat change.

Other Areas Important to Wildlife

Management Actions Application of the Wyoming BLM Standard Mitigation Guidelines for Surface Disturbing Activities will be used to protect many types of areas of importance to wildlife. In addition, other special management practices will be used as appropriate to focus management emphasis on important resources or to minimize potential conflicts.

When considering needs for protective measures, the Wyoming Game and Fish Department (WGFD) will be consulted concerning proposals involving surface disturbance and other disruptive activities in these important habitats. The BLM will also coordinate and cooperate with intermingled and adjacent landowners in managing these habitats.

Crucial winter ranges for all big game species will be protected. Surface disturbance will be mitigated to restore or replace habitat. In addition, previously depleted habitat in crucial big game winter ranges will be reclaimed to the extent possible.

In areas where crucial winter ranges for more than one species of big game overlap (approximately 122,880 acres of BLM administered public land), habitat quality will be maintained (see Map 27). Previously depleted habitat in these areas will be reclaimed to the extent possible. In addition, the BLM will employ spatial and temporal management of development, facilities, and users to avoid activity in sensitive areas or during sensitive times of the year.

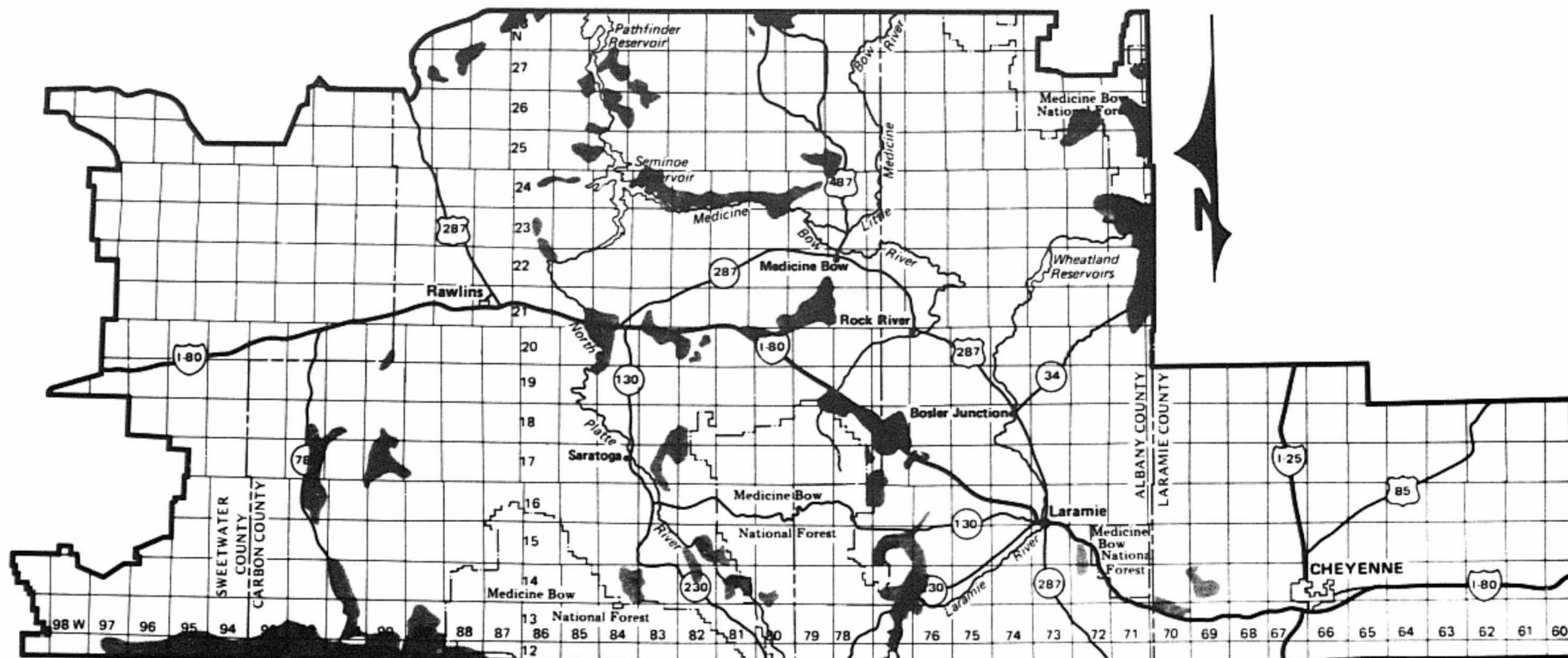
Sage grouse and sharp-tailed grouse strutting/dancing grounds and nesting habitat will be protected.

The BLM will consider consolidating public land to obtain important wildlife habitat areas such as (a) perennial streams, lakes and wetlands (USFWS also has identified this as a priority); (b) raptor concentration areas; (c) crucial winter range for bighorn sheep, elk, mule deer, or antelope; and (d) other high priority habitats.

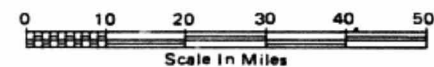
Other

In addition to the actions outlined above, some management actions that will benefit wildlife are included in the discussions on management of ACECs, fire, forests, livestock grazing, coal, oil and gas, locatable minerals, and recreation.

As proposals are submitted, animal damage control (ADC) activities in the planning area, including the use of poisons that are lethal to vertebrate animals, will be considered. These activities are subject to established ADC procedures and policies, including NEPA requirements, as outlined in the national and state level memoranda of understanding between BLM and USDA Animal and Plant Health Inspection Service (APHIS), BLM manual 6830, and other directives. These activities are also subject to the Rawlins BLM District ADC Management Plan which is maintained current and consistent with those procedures and policies.



- Overlapping Crucial Winter Ranges (3 species)
- Overlapping Crucial Winter Ranges (2 species)



46

Map 27
OVERLAPPING CRUCIAL WINTER RANGES
Great Divide Resource Management Plan
November, 1990

WYOMING BUREAU OF LAND MANAGEMENT (BLM) STANDARD MITIGATION GUIDELINES FOR SURFACE-DISTURBING ACTIVITIES

INTRODUCTION

The "Wyoming BLM Standard Oil and Gas Lease Stipulations" were developed in 1986. During their implementation, it was recognized that various land uses, other than those related to oil and gas exploration and development, should be subject to similar kinds of environmental protection requirements. Using the Wyoming BLM standard oil and gas lease stipulations as a basis, development of the "Wyoming BLM Standard Mitigation Measures for Surface-Disturbing Activities" began.

The term "guidelines" better describes the intent and use of these mitigation standards than the terms "stipulations" or "measures." These guidelines are primarily for the purpose of attaining statewide consistency in how requirements are determined for avoiding and mitigating environmental impacts and resource and land use conflicts. Consistency in this sense does not mean that identical requirements would be applied for all similar types of land use activities that may cause similar types of impacts. Nor does it mean that the requirements or guidelines for a single land use activity would be identical in all areas.

There are two ways the standard mitigation guidelines are used in the resource management plan/environmental impact statement (RMP/EIS) process: (1) as part of the planning criteria in developing the RMP alternatives, and (2) in the analytical processes of both developing the alternatives and analyzing the impacts of the alternatives. In the first case, an assumption is made that any one or more of the standard mitigations will be appropriately included as conditions of relevant actions being proposed or considered in each alternative. In the second case, the standard mitigations are used (1) to develop a baseline for measuring and comparing impacts among the alternatives; (2) to identify other actions and alternatives that should be considered, and (3) to help determine whether more stringent or less stringent mitigations should be considered.

Some of the seasonal restrictions in the standard oil and gas lease stipulations contain the statement, "This limitation does not apply to maintenance and operation of producing wells." This statement was included because the stipulations were developed specifically for application to oil and gas leases at

the time of issuance, not for activities associated with producing wells. At lease issuance, the only action that can be generally contemplated is the possibility that exploratory drilling may occur somewhere on the lease area. Unfortunately, the provision has been interpreted by some people to mean that the seasonal restriction disappears at the operational stage (i.e., if a producing well is attained). It must be understood that at both the oil and gas exploration stage and the operation or development stages, additional site-specific environmental analyses are conducted and any needed restrictions or mitigations identified become part of the operational or development plan. For example, wells may continue to produce, but related activity may be limited. Thus, it is possible for such seasonal restrictions to continue in effect and be applicable to maintenance and operation of producing wells, if supported by the environmental analyses.

The RMP/EIS does not decide or dictate the exact wording or inclusion of these guidelines. Rather, the standard guidelines are used in the RMP/EIS process as a tool to help develop the RMP alternatives and to provide a baseline for comparative impact analysis in arriving at RMP decisions. These guidelines will be used in the same manner in analyzing activity plans and other site-specific proposals. These guidelines and their wording are matters of policy. As such, specific wording is subject to change primarily through administrative review, not through the RMP/EIS process. Any further changes that may be made in the continuing refinement of these guidelines and any development of program-specific standard stipulations will be handled in another forum, including appropriate public involvement and input.

PURPOSE

The purposes of the "Standard Mitigation Guidelines" are (1) to reserve, for the BLM, the right to modify the operations of all surface and other human presence disturbance activities as part of the statutory requirements for environmental protection, and (2) to inform a potential lessee, permittee, or operator of the requirements that must be met when using BLM-administered public lands. These guide-

lines have been written in a format that will allow for (1) their direct use as stipulations, and (2) the addition of specific or specialized mitigation following the submission of a detailed plan of development or other project proposal, and an environmental analysis.

Those resource activities or programs currently without a standardized set of permit or operation stipulations can use the mitigation guidelines as stipulations or as conditions of approval, or as a baseline for developing specific stipulations for a given activity or program.

Because use of the mitigation guidelines was integrated into the RMP/EIS process and will be integrated into the site-specific environmental analysis process, the application of stipulations or mitigation requirements derived through the guidelines will provide more consistency with planning decisions and plan implementation than has occurred in the past. Application of the standard mitigation guidelines to all surface and other human presence disturbance activities concerning BLM-administered public lands and resources will provide more uniformity in mitigation than has occurred in the past.

STANDARD MITIGATION GUIDELINES

1. Surface Disturbance Mitigation Guideline

Surface disturbance will be prohibited in any of the following areas or conditions. Exception, waiver, or modification of this limitation may be approved in writing, including documented supporting analysis, by the Authorized Officer.

- Slopes in excess of 25 percent.
- Within important scenic areas (Class I and II Visual Resource Management Areas).
- Within 500 feet of surface water and/or riparian areas.
- Within either one-quarter mile or the visual horizon (whichever is closer) of historic trails.
- Construction with frozen material or during periods when the soil material is saturated or when watershed damage is likely to occur.

Guidance

The intent of the **SURFACE DISTURBANCE MITIGATION GUIDELINE** is to inform interested parties

(potential lessees, permittees, or operators) that when one or more of the five (1a through 1e) conditions exist, surface-disturbing activities will be prohibited unless or until a permittee or his designated representative and the surface management agency (SMA) arrive at an acceptable plan for mitigation of anticipated impacts. This negotiation will occur prior to development.

Specific criteria (e.g., 500 feet from water) have been established based upon the best information available. However, such items as geographical areas and seasons must be delineated at the field level.

Exception, waiver, or modification of requirements developed from this guideline must be based upon environmental analysis of proposals (e.g., activity plans, plans of development, plans of operation, applications for permit to drill) and, if necessary, must allow for other mitigation to be applied on a site-specific basis.

2. Wildlife Mitigation Guideline

- To protect important big game winter habitat, activities or surface use will not be allowed from November 15 to April 30 within certain areas encompassed by the authorization. The same criteria apply to defined big game birthing areas from May 1 to June 30.

Application of this limitation to operation and maintenance of a developed project must be based on environmental analysis of the operational or production aspects.

Exception, waiver, or modification of this limitation in any year may be approved in writing, including documented supporting analysis, by the Authorized Officer.

- To protect important raptor and/or sage and sharp-tailed grouse nesting habitat, activities or surface use will not be allowed from February 1 to July 31 within certain areas encompassed by the authorization. The same criteria apply to defined raptor and game bird winter concentration areas from November 15 to April 30.

Application of this limitation to operation and maintenance of a developed project must be based on environmental analysis of the operational or production aspects.

Exception, waiver, or modification of this limitation in any year may be approved in writing, including documented supporting analysis, by the Authorized Officer.

- No activities or surface use will be allowed on that portion of the authorization area identified

within (*legal description*) for the purpose of protecting (e.g., sage/sharp-tailed grouse breeding grounds, and/or other species/activities) habitat.

Exception, waiver, or modification of this limitation in any year may be approved in writing, including documented supporting analysis, by the Authorized Officer.

- d. Portions of the authorized use area legally described as (*legal description*), are known or suspected to be essential habitat for (*name*) which is a threatened or endangered species. Prior to conducting any onsite activities, the lessee/permittee will be required to conduct inventories or studies in accordance with BLM and U.S. Fish and Wildlife Service guidelines to verify the presence or absence of this species. In the event that (*name*) occurrence is identified, the lessee/permittee will be required to modify operational plans to include the protection requirements of this species and its habitat (e.g., *seasonal use restrictions, occupancy limitations, facility design modifications*).

Guidance

The **WILDLIFE MITIGATION GUIDELINE** is intended to provide two basic types of protection: seasonal restriction (2a and 2b) and prohibition of activities or surface use (2c). Item 2d is specific to situations involving threatened or endangered species. Legal descriptions will ultimately be required and should be measurable and legally definable. There are no minimum subdivision requirements at this time. The area delineated can and should be defined as necessary, based upon current biological data, prior to the time of processing an application and issuing the use authorization. The legal description must eventually become a part of the condition for approval of the permit, plan of development, and/or other use authorization.

The seasonal restriction section identifies three example groups of species and delineates three similar time frame restrictions. The big game species including elk, moose, deer, antelope, and bighorn sheep, all require protection of crucial winter range between November 15 and April 30. Elk and bighorn sheep also require protection from disturbance from May 1, to June 30, when they typically occupy distinct calving and lambing areas. Raptors include eagles, accipiters, falcons (peregrine, prairie, and merlin), buteos (ferruginous and Swainson's hawks), osprey, and burrowing owls. The raptors and sage and sharp-tailed grouse require nesting protection between February 1 and July 31. The same birds often require protection from disturbance from November 15 through April 30 while they occupy winter concentration areas.

Item 2c, the prohibition of activity or surface use, is intended for protection of specific wildlife habitat areas or values within the use area that cannot be protected by using seasonal restrictions. These areas or values must be factors that limit life-cycle activities (e.g., *sage grouse strutting grounds, known threatened and endangered species habitat*).

Exception, waiver, or modification of requirements developed from this guideline must be based upon environmental analysis of proposals (e.g., activity plans, plans of development, plans of operation, applications for permit to drill) and, if necessary, must allow for other mitigation to be applied on a site-specific basis.

3. Cultural Resource Mitigation Guideline

When a proposed discretionary land use has potential for affecting the characteristics which qualify a cultural property for the National Register of Historic Places (National Register), mitigation will be considered. In accordance with Section 106 of the Historic Preservation Act, procedures specified in 36 CFR 800 will be used in consultation with the Wyoming State Historic Preservation Officer and the Advisory Council on Historic Preservation in arriving at determinations regarding the need and type of mitigation to be required.

Guidance

The preferred strategy for treating potential adverse effects on cultural properties is "avoidance." If avoidance involves project relocation, the new project area may also require cultural resource inventory. If avoidance is imprudent or unfeasible, appropriate mitigation may include excavation (data recovery), stabilization, monitoring, protection barriers and signs, or other physical and administrative measures.

Reports documenting results of cultural resource inventory, evaluation, and the establishment of mitigation alternatives (if necessary) shall be written according to standards contained in BLM Manuals, the cultural resource permit stipulations, and in other policy issued by the BLM. These reports must provide sufficient information for Section 106 consultation. Reports shall be reviewed for adequacy by the appropriate BLM cultural resource specialist. If cultural properties on, or eligible for, the National Register are located within these areas of potential impact and cannot be avoided, the Authorized Officer shall begin the Section 106 consultation process in accordance with the procedures contained in 36 CFR 800.

Mitigation measures shall be implemented according to the mitigation plan approved by the BLM Authorized Officer. Such plans are usually prepared by the land use applicant according to BLM specifications. Mitigation plans will be reviewed as part of Section 106 consultation for National Register eligible or listed properties. The extent and nature of recommended mitigation shall be commensurate with the significance of the cultural resource involved and the anticipated extent of damage. Reasonable costs for mitigation will be borne by the land use applicant. Mitigation must be cost effective and realistic. It must consider project requirements and limitations, input from concerned parties, and be BLM approved or BLM formulated.

Mitigation of paleontological and natural history sites will be treated on a case-by-case basis. Factors such as site significance, economics, safety, and project urgency must be taken into account when making a decision to mitigate. Authority to protect (through mitigation) such values is provided for in FLPMA, Section 102(a)(8). When avoidance is not possible, appropriate mitigation may include excavation (data recovery), stabilization, monitoring, protection barriers and signs, or other physical and administrative protection measures.

4. Special Resource Mitigation Guideline

To protect (*resource value*), activities or surface use will not be allowed (i.e., *within a specific distance of the resource value or between date to date*) in (*legal description*).

Application of this limitation to operation and maintenance of a developed project must be based on environmental analysis of the operational or production aspects.

Exception, waiver, or modification of this limitation in any year may be approved in writing, including documented supporting analysis, by the Authorized Officer.

Example Resource Categories (Select or identify category and specific resource value):

- a. Recreation areas.
- b. Special natural history or paleontological features.
- c. Special management areas.
- d. Sections of major rivers.
- e. Prior existing rights-of-way.
- f. Occupied dwellings.
- g. Other (specify).

Guidance

The **SPECIAL RESOURCE MITIGATION GUIDELINE** is intended for use only in site-specific situations where one of the first three general mitigation guidelines will not adequately address the concern. The resource value, location, and specific restrictions must be clearly identified. A detailed plan addressing specific mitigation and special restrictions will be required prior to disturbance or development and will become a condition for approval of the permit, plan of development, or other use authorization.

Exception, waiver, or modification of requirements developed from this guideline must be based upon environmental analysis of proposals (e.g., activity plans, plans of development, plans of operation, applications for permit to drill) and, if necessary, must allow for other mitigation to be applied on a site-specific basis.

5. No Surface Occupancy Guideline

No Surface Occupancy will be allowed on the following described lands (*legal description*) because of (*resource value*).

Example Resource Categories (Select or identify category and specific resource value):

- a. Recreation Areas (e.g., campgrounds, historic trails, national monuments).
- b. Major reservoirs/dams.
- c. Special management area (e.g., areas of critical environmental concern, known threatened or endangered species habitat, wild and scenic rivers).
- d. Other (specify).

Guidance

The **NO SURFACE OCCUPANCY (NSO) MITIGATION GUIDELINE** is intended for use only when other mitigation is determined insufficient to adequately protect the public interest and is the only alternative to "no development" or "no leasing." The legal description and resource value of concern must be identified and be tied to an NSO land use planning decision.

Waiver of, or exception(s) to, the NSO requirement will be subject to the same test used to initially justify its imposition. If, upon evaluation of a site-specific proposal, it is found that less restrictive mitigation would adequately protect the public interest

APPENDIX I

or value of concern, then a waiver or exception to the NSO requirement is possible. The record must show that because conditions or uses have changed, less restrictive requirements will protect the public interest. An environmental analysis must be conducted and documented (e.g., environmental assessment, environmental impact statement, etc., as necessary) in order to provide the basis for a waiver or exception to an NSO planning decision. Modification of the NSO requirement will pertain only to refinement or correction of the location(s) to which it applied. If the waiver, exception, or modification is found to be consistent with the intent of the planning decision, it may be granted. If found inconsistent with the intent of the planning decision, a plan amendment would be required before the waiver, exception, or modification could be granted.

When considering the "no development" or "no leasing" option, a rigorous test must be met and fully documented in the record. This test must be based upon stringent standards described in the land use planning document. Since rejection of all development rights is more severe than the most restrictive mitigation requirement, the record must show that consideration was given to development subject to reasonable mitigation, including "no surface occupancy." The record must also show that other mitigation was determined to be insufficient to adequately protect the public interest. a "no development" or "no leasing" decision should not be made solely because it appears that conventional methods of development would be unfeasible, especially where an NSO restriction may be acceptable to a potential permittee. In such cases, the potential permittee should have the opportunity to decide whether or not to go ahead with the proposal (or accept the use authorization), recognizing that an NSO restriction is involved.

BLANK PAGE

COAL

INTRODUCTION

This appendix summarizes the final federal coal management decisions for the planning area. The process used to arrive at these decisions is briefly explained. This summary is intended to help the public to understand the federal coal management program as it applies to the planning area and to show the requirements that must be met under 43 CFR 3400. These planning decisions will guide the development of the federal coal resource in this area during the remainder of the 1990s and afterward.

To implement competitive coal leasing under regulations contained in 43 CFR 3420, on November 9, 1979, the BLM established a number of federal coal production regions, including the the Green River-Hams Fork Region. That coal region includes the following counties: in Wyoming, Albany, Carbon, Lincoln, Sublette, Sweetwater, and Uinta; in Colorado, Grand, Jackson, Moffatt, Rio Blanco, and Routt. It was estimated that the coal production region contained sufficient federal coal deposits to justify offering coal leases through the competitive leasing process set out in 43 CFR 3420.3 through 3420.6. Much of the planning area is within this coal region.

During its October 9, 1987, meeting in Denver, the Green River-Hams Fork Regional Coal Team discussed the proposal to operate in a lease-by-application mode. As a result of that meeting, the regional coal team decided to offer an additional opportunity for public comment, with the comments received to be considered and responded to before the director of the BLM makes a final decision on the subject.

A decision document on lease-by-application was published in the *Federal Register* of December 28, 1987, along with a request for public comments. Two comments were received, both of which supported leasing-by-application in the Green River-Hams Fork Region. Therefore, since there is limited industry interest in additional tracts of federal coal in this region, coal leasing in the counties listed above will be handled on a lease-by-application basis under 43 CFR 3425. (The governors of Colorado and Wyoming concur in the recommendation.) The regional coal team will continue to be involved in the lease-by-application process as described in section 6c of its charter.

It is expected that this action will result in substantial savings in administrative costs to the federal government and the states of Colorado and Wyoming while a responsive leasing process is retained for the coal industry.

Whether coal is leased through leasing-by-application, activity planning, or coal lease exchanges, decisions to lease must be made within the area identified in this document as available for further consideration for coal leasing.

The objectives in managing the federal coal resource in this planning area are (a) to provide for both short- and long-range development of federal coal in an orderly and timely manner, consistent with the federal coal management program, policies, environmental integrity, national energy needs, and related demands; (b) to identify federal coal that is acceptable for further consideration for leasing; and (c) to identify appropriate mitigation for sensitive areas.

REQUIREMENTS AND MITIGATION

Introduction

Lessees will be required to develop their federal leases in compliance with applicable federal, state, and local laws and regulations. These would be considered in-place constraints on a lessee's activities.

All areas identified in this document as acceptable for further consideration for coal leasing are subject to the following mitigation requirements:

Cultural Resources

- Before undertaking any activities that may disturb the surface of the leased lands, the lessee shall conduct a cultural resource intensive field inventory in a manner specified by the authorized officer of BLM on portions of the mine plan area and adjacent areas, or exploration plan area, that may be adversely affected by lease-related activities and which were not previously inventoried at such a level of intensity. The inventory shall be conducted by a qualified professional cultural resource specialist (i.e., archaeologist, historian, or historical architect, as appropriate) approved by the Authorized Officer of the surface managing agency (BLM if the surface is privately owned), and a report of the inventory and recommendations for protecting any cultural resources identified shall be submitted to the Regional Director of the Office of Surface Mining (OSM) and the Authorized Officer of BLM (or only to the authorized officer of BLM if activities are associated with coal exploration outside an approved mining permit area), to protect cultural resources on the leased land. The lessee shall undertake measures, in accordance with instructions from the Regional Director or Authorized Officer to protect cultural resources on the leased land.

The lessee shall not commence the surface-disturbing activities until permission to proceed is given by the Regional Director or Authorized Officer.

- The lessee shall protect all known cultural resource properties within the lease area from lease related activities until the cultural resource mitigation measures can be implemented as part of an approved mining and reclamation plan or exploration plan.
- The cost of conducting the inventory, preparing reports, and carrying out mitigation measures shall be borne by the lessee.
- If cultural resources are discovered during operations under a lease, the lessee shall immediately bring them to the attention of the Regional Director or authorized officer, or the authorized officer of the surface managing agency if the Regional Director is not available. The lessee shall not disturb such resources except as may be subsequently authorized by the Regional Director or authorized officer. Within two (2) working days of notification, the Regional Director or authorized officer will evaluate or have evaluated any cultural resources discovered and will determine if any action may be required to protect or preserve such discoveries. The cost of data recovery for cultural resources discovered during lease operations shall be borne by the surface managing agency unless otherwise specified by the Authorized Officer of BLM or of the surface managing agency (if different).
- All cultural resources shall remain under the jurisdiction of the United States until ownership is determined under applicable law.

Paleontological Resources

If paleontological resources, either large and conspicuous and/or of significant value are discovered during construction, the find will be reported to the authorized officer immediately. Construction will be suspended within 250 feet of said find. An evaluation of the paleontological discovery will be made by a BLM-approved professional paleontologist within five (5) working days, weather permitting, to determine the appropriate action(s) to prevent the potential loss of any significant paleontological value. Operations within 250 feet of such discovery will not be resumed until written authorization to proceed is issued by the authorized officer. The lessee will bear the cost of any required paleontological appraisals, surface collection of fossils, or salvage of any large conspicuous fossils of significant scientific interest discovered during the operations.

Black-footed Ferret Habitat

The lessee will be required to monitor and inventory the lease area for establishment of potential black-footed ferret habitat (i.e. prairie dog towns) and, if any such habitat is found, to conduct ferret inventories, all in accordance with the guidelines below. In the event that ferret occurrence is identified, the lessee shall notify the BLM and USFWS and will be required to adhere to any modifications in the mining operation provided by the USFWS and the BLM to protect the endangered species.

The following Black-Footed Ferret Inventory Guidelines will be followed. Proposed developments such as coal lease lands, power plant sites, well fields, dam sites, and facilities relating to these developments should be surveyed for prairie dogs before the project is approved. If prairie dogs are found on the proposed site, colonies should be mapped on topographic maps and each colony surveyed using recommended USFWS Black-Footed Ferret Survey Procedures. Ferret searches should be scheduled as close to actual construction as possible and not more than

1 year prior to disturbance to minimize the possibility of missing ferrets that might move onto the area during the period between completion of surveys and the start of construction. Where project disturbance takes place over a long period of time, such as on a coal site, additional surveys or baseline studies for black-footed ferrets are recommended. Results of these surveys will be submitted to the BLM and USFWS for review and clearance. In addition, any burrowing owl nests will be noted and reported to BLM and USFWS.

THE COAL PLANNING PROCESS

Introduction

The federal coal management program established four major steps to be used in the identification of federal coal areas that are acceptable for coal development: (1) identification of coal development potential, including a call for coal resource information (43 CFR 3420.1-2); (2) application of the coal unsuitability criteria; (3) multiple-use conflict evaluation; and (4) surface owner consultation. Collectively, these steps, which are called the "coal screening process" (43 CFR 3420.1-4), are applied in sequence to the review area.

The four major steps and how they were applied to the review area are described in the following sections.

Step 1: Identification of Development Potential Coal

In step 1, areas of coal with potential for development are identified with the use of government drill hole data, data collected through exploration licenses, geological and economic data submitted by coal companies, and interpretations of available geological data from various other sources. Expressions of interest from the coal industry also are used to guide this identification process. Expressions of interest were received for the Atlantic Rim, Indian Springs, North Indian Springs, Wild Horse Draw, and Red Rim areas.

When this screening step is applied, areas without development potential coal and areas with no known interest in development are excluded from further consideration. The areas found to have development potential are closer to existing transportation and/or contain better quality coal than the areas excluded from further consideration.

Table COAL-AP-1 presents coal quality and quantity data on all areas in the planning area that were determined to have coal with development potential. These areas are shown on map 19.

APPENDIX II

TABLE COAL-AP-1
COAL RESOURCES IN THE PLANNING AREA

Coal Area	Federal Acreage	Federal Tonnage (in place)	Average Proximate Analysis				
			BTU/lb. ¹	Moisture	Volatiles	Carbon	Ash
Red Rim	9,720	40.6 x 10 ⁶	8,560	22.0	not available	not available	9.30
Wild Horse Draw	1,280	1.7 x 10 ⁶	10,818	12.07	not available	not available	7.57
China Butte	6,240	73.9 x 10 ⁶	8,800	25.57	not available	not available	7.35
Indian Springs	2,500	25.0 x 10 ⁶	9,626	14.75	34.00	42.52	8.24
North Indian Springs	3,840	25.0 x 10 ⁶	9,015	17.14	37.42	37.75	7.69
Atlantic Rim	3,650	79.1 x 10 ⁶	10,277	13.41	34.47	43.32	8.79
NE Cow Creek	7,325	201.8 x 10 ⁶	10,856	15.07	33.40	46.70	5.00
Hanna Basin	30,040	191.0 x 10 ⁶	10,140-10,420	12.58-12.76	34.30-36.68	41.82-45.19	7.93-8.75
							0.46-1.00

¹ BTU/lb. = British thermal units per pound.

The Atlantic Rim, China Butte, and Red Rim areas have potential for surface mining only (see maps 28, 29, and 30). The Indian Springs and North Indian Springs areas have potential only for in situ development of coal resources (see maps 31 and 32). There is potential for both surface and subsurface mining in the Hanna Basin area. The Hanna Basin area contains coal with development potential for surface mining (86 million tons) and subsurface mining (105 million tons). Coal in the Wild horse Draw and Northwest Cow Creek has been determined to have no potential for development.

The remaining three screening steps are applied to the coal areas identified in step 1. They are applied in sequence and only to the lands identified as acceptable for coal development in each preceding step.

Step 2: Application of Coal Unsuitability Criteria

Introduction

As required by 43 CFR 3461, the 20 coal unsuitability criteria were applied to the areas identified in step 1.

These criteria involve consideration of existing resource values such as scenic areas, natural and historic values, wildlife, floodplains, alluvial valley floors, and other important features. The purposes of this step are (a) to identify areas with key features or environmental sensitivity that would make them unsuitable for surface coal mining or for subsurface coal mining where there would be surface operations and impacts associated with subsurface coal mining, and (b) to identify any appropriate mitigative measures resulting from the application of the unsuitability criteria and exceptions.

The results of the application of the unsuitability criteria to each coal area are described in the follow-

ing sections. After an expression of interest is filed and prior to tract delineation, the BLM will reinventory a proposed tract area and adjacent land to refine the unsuitability application. If the inventory reveals the presence of species or habitats covered under criteria 9 to 15, the BLM will coordinate with the USFWS and WGFD to determine if any federal coal lands within the proposed tract area should be declared unsuitable.

Red Rim

Introduction

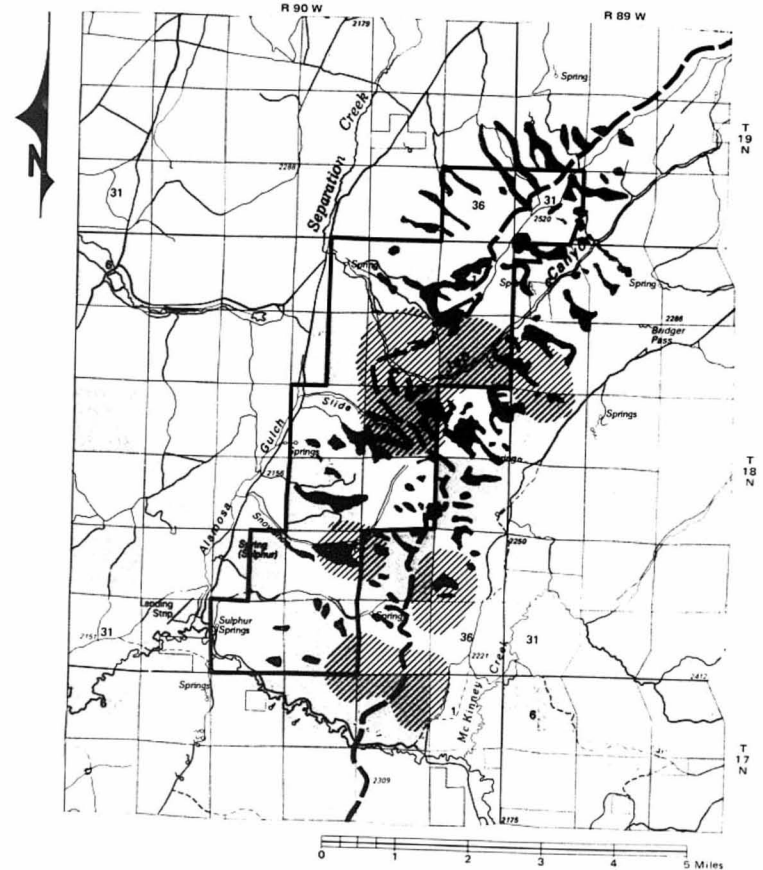
No unsuitable areas were identified for the Red Rim area under coal unsuitability criteria 1, 3 through 8, 10, 12, or 17 through 20.

Criterion 2—Rights-of-Way and Easements

In the Red Rim area, most of the rights-of-way crossing the coal areas can be relocated to accommodate coal mining and related activities. Thus, the BLM made a general determination that right-of-way areas are acceptable for coal development, subject to valid existing rights and negotiations for relocating if necessary. Any unforeseen conflicts in these areas should be identified and resolved during the coal activity planning process or during development of mining and reclamation plans.

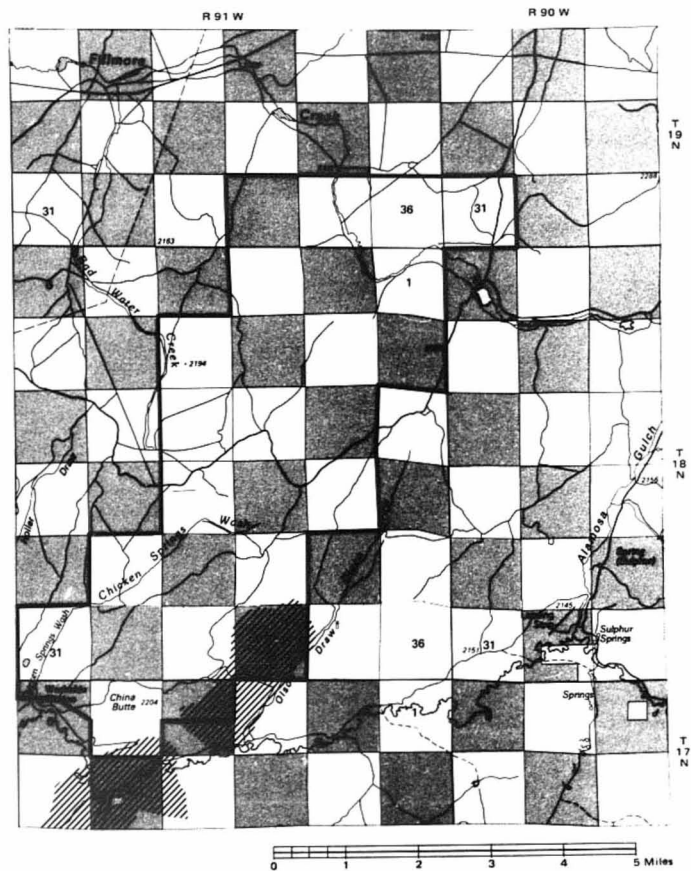
Criterion 9—Federally Listed Threatened or Endangered Species Habitat

No areas in the Red Rim area were determined to be unsuitable under criterion 9; however, some potential habitat areas for black-footed ferrets have not yet been searched to determine whether or not ferrets are present. The necessary searches and consultation with USFWS will be conducted during coal activity planning.



- Coal Area Boundary
- Federally Owned Coal
- To Mitigate disturbance to elk, surface disturbance will not be allowed east of the boundary
- ▨ Buffer Zones for Eagles, Prairie Falcons, and Ferruginous Hawks
- Aspen Stands

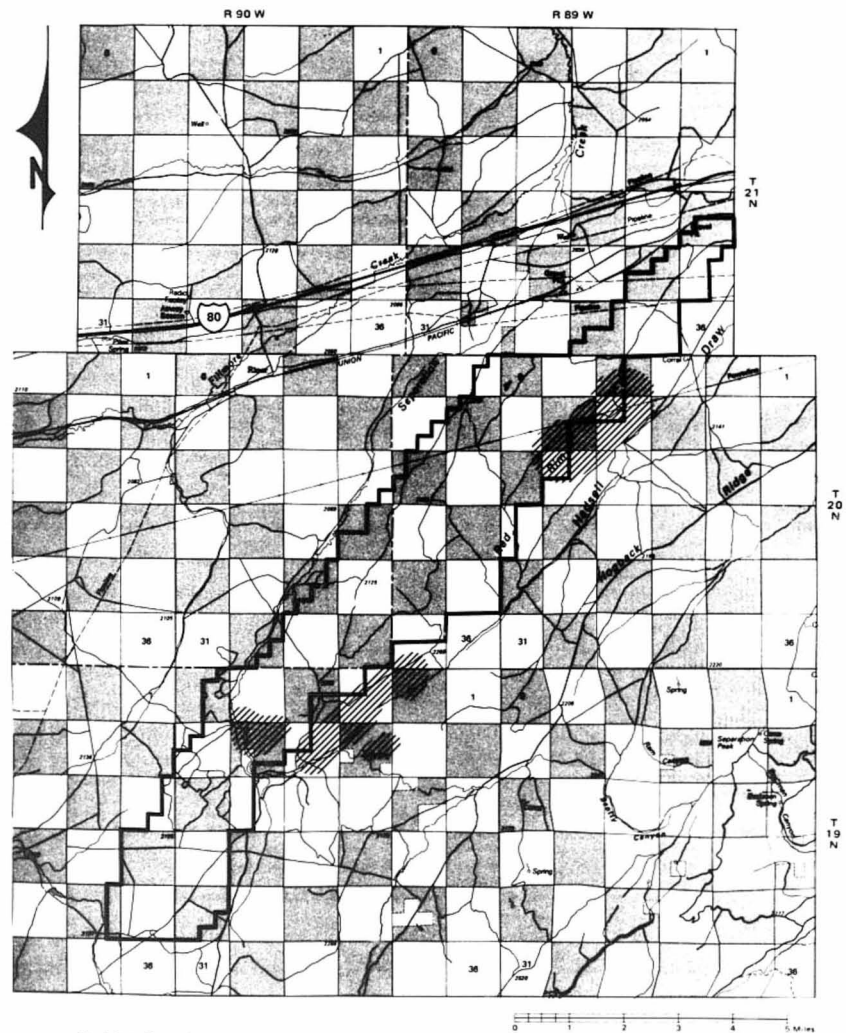
Map 28
ATLANTIC RIM COAL AREA
Great Divide Resource Management Plan
November, 1990



- Coal Area Boundary
- Federally Owned Coal
- ▨ Buffer Zones for Eagles and Prairie Falcons

Map 29
CHINA BUTTE COAL AREA
Great Divide Resource Management Area
November, 1990

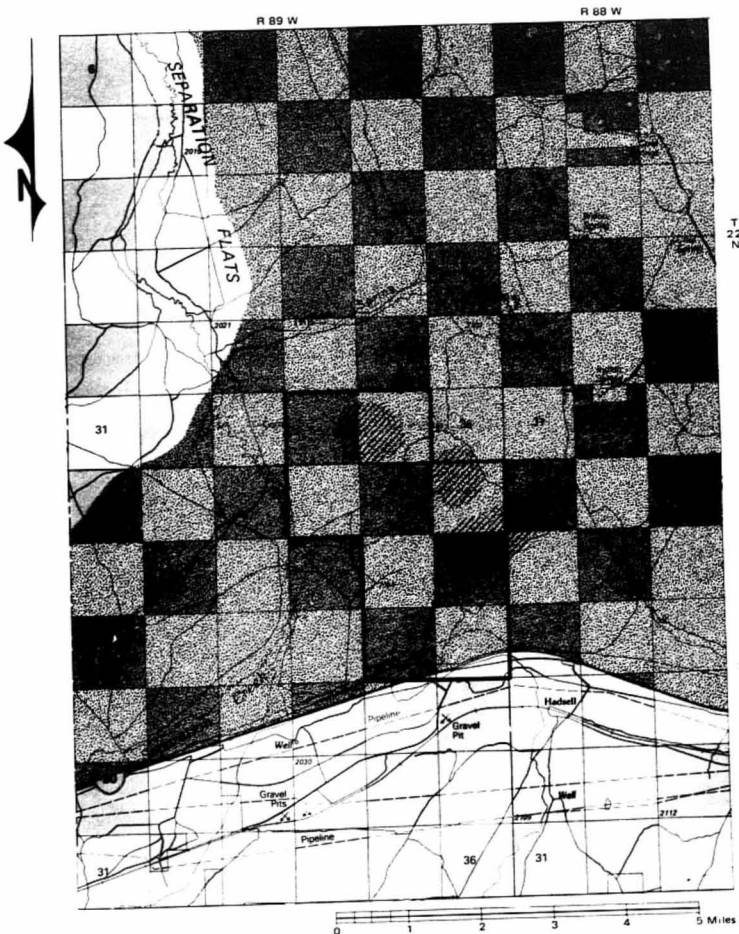
59



- Coal Area Boundary
- Federally Owned Coal
- ▨ Buffer Zones for Eagles and Prairie Falcons

Map 30
RED RIM COAL AREA
Great Divide Resource Management Plan
November, 1990

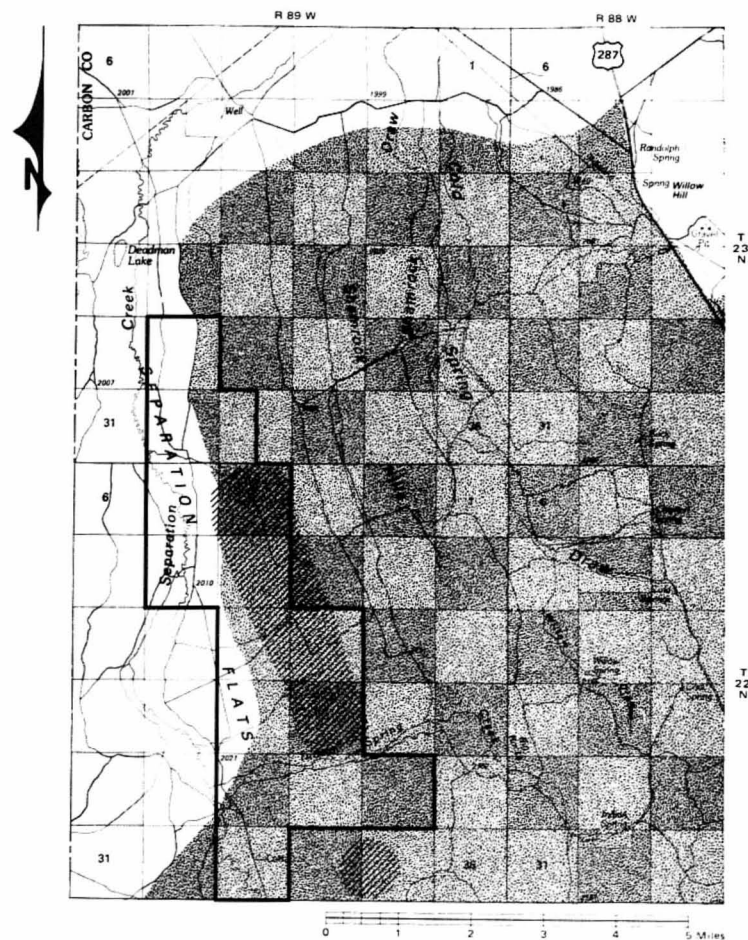
58



- Coal Area Boundary
- Federally Owned Coal
- ▨ Pronghorn Antelope Crucial Winter Range
- ▤ Buffer Zones for Eagles and Prairie Falcons

Map 31
INDIAN SPRINGS COAL AREA
Great Divide Resource Management Plan
November, 1990

59



- Coal Area Boundary
- Federally Owned Coal
- ▨ Pronghorn Antelope Crucial Winter Range
- ▤ Buffer Zones for Eagles and Prairie Falcons

Map 32
NORTH INDIAN SPRINGS COAL AREA
Great Divide Resource Management Plan
November, 1990

60

Criteria 11 and 13—Bald and Golden Eagle Nests and Falcon Cliff Nesting Sites

No areas were determined to be unsuitable under criterion 11 or 13. The area is acceptable for further consideration for leasing subject to the following conditions:

For the protection of nesting eagles and prairie falcons and their associated buffer zones, no surface operations will be allowed in such areas as long as the USFWS determines that the nest is viable (see map 30). If any exceptions are granted for support facilities such as telephone lines, power lines, pipelines, or surface facilities, no surface-disturbing activities will be permitted in such areas during breeding and nesting seasons (prairie falcons, March 15 through July 15; golden eagles, February 15 through July 15). In addition, such exceptions will be subject to restrictive placement and type or design of facilities and to seasonal occupancy restrictions, and they may be allowed only with prior written permission of the authorized officer of the BLM after concurrence of USFWS and consultation with WGFD.

Larger disturbances such as upgrading of existing roads or construction of new roads, buildings, or railroad facilities within the buffer zone will not be permitted. Since these and other bird species may move onto or off a given area or elsewhere in the project area, their activities must be monitored to determine changing protection requirements. If any new nests should become established on or within 1 mile of the lease area during the course of mining, the lessee will consult with the USFWS to determine mitigative measures that may be needed to protect nesting birds.

Criterion 14—Migratory Bird Habitat

No areas in the Red Rim area were determined to be unsuitable under criterion 14. The area is acceptable for further consideration for leasing subject to the following conditions:

Surface disturbance and occupancy restrictions may be required to protect ferruginous hawk nesting areas within raptor nest concentration areas. Therefore, the lessee shall submit to the BLM, the USFWS, the Office of Surface Mining Reclamation and Enforcement (OSMRE), and the WGFD a habitat recovery and replacement plan for protection or enhancement of ferruginous hawk populations affected by habitat loss or displacement of present or historical habitat. The habitat recovery and replacement plan shall be developed in consultation with the BLM, OSMRE, WGFD, and USFWS and may be submitted before or concurrently with the filing of the mine permit application package. The BLM, OSMRE, WGFD, and USFWS will be allowed a minimum of 120 days to review the habitat recovery and replacement plan and to resolve any conflicts or problems in the plan.

The final habitat recovery and replacement plan must provide the locations, current status and reproductive history (two years minimum) of each nest on or within 2 miles of the lease area and shall indicate the methods to be employed by the lessee to ensure that ferruginous hawk productivity and habitat diversity will not decline in the area.

The plan must include, but not be limited to, consideration of the following points:

Nest site protection during the nesting season.

Enhancement and protection of adjacent nesting habitat that will not be affected by mining disturbance (for example, construction of rock structures or pillars or actions intended to increase habitat diversity).

Relocation of unoccupied nests to enhance other suitable habitat before surface disturbance begins.

Restoration of topographic features and vegetative composition to restore nesting habitat and prey diversity affected by mining.

Facilitation of raptor nest protection with private landowners and other public entities on lands adjacent to the lease area.

The plan must include a timetable for implementation of the habitat recovery or replacement plan in relation to the overall mine plan. Since these and other bird species may move onto or off a given area or elsewhere in the project area, their activities must be monitored to determine changing protection requirements. If any new ferruginous hawk nests should become established on or within 1 mile of the lease area during the course of mining, the lessee will consult with the USFWS to determine mitigative measures that may be needed to protect nesting hawks.

Criterion 15—Habitat for State High-Interest Wildlife and Plants

On September 27, 1982, the National Wildlife Federation and the Wyoming Wildlife Federation filed a petition with the OSMRE to designate approximately 9,000 acres as unsuitable. On May 19, 1986, the OSMRE published its decision in the Federal Register. In part, the notice read as follows:

... Exercising this discretion, I decline to designate all or any part of the Red Rim petition area as unsuitable for surface coal mining operations, but hereby require that the approval of any Federal mining plan for the petition area include a condition that restricts from development the pronghorn winter range located within the south portion of the petition area until reclamation of pronghorn winter habitat in the north portion of the petition area has been demonstrated to be successful. ...

Reclamation in the north portion of the petition area shall be demonstrated to be successful when the Department of the Interior finds in writing that the operator/lessee has (1) demonstrated its capability to restore the carrying capacity of the critical winter range, (2) met the requirements of SMCRA, the applicable regulatory program, and the Bureau of Land Management's (BLM's) land-use planning decisions for the petition area, and (3) demonstrated that postmining vegetation would provide for pronghorn forage production equal to or greater than premining conditions. The postmining vegetation (composition and diversity [structural and species-specific]) must approximate premining conditions and be self-renewing when subjected to foraging use. The north portion of the petition area consists of sections 24, 26, and 34, T. 21 N., R. 89 W.; sections 4, 6, 8, and 18, T. 20 N., R. 99 W.; and sections 12, 14, 22, and 24, T. 20 N., R. 90 W. The south portion of the petition area consists of sections 26, 28, 32, and 34, T. 20 N., R. 90 W.; sections 4, 6, 8, 18, and 30, T. 19 N., R. 90 W.; and sections 24 and 26, T. 19 N., R. 91 W.

The decision made by OSMRE is consistent with this approved RMP.

Criterion 16—Floodplains

It was determined that the floodplain area of Separation Creek in the Red Rim area can be mined by all or certain stipulated methods of coal mining without substantial threat of loss to people or property and to the natural and beneficial values of the floodplain, either on a coal lease tract or down-

stream. Examples of mitigation may include relocation of channels during mining and restoration of channel locations after mining, controlling sediment yields and prohibiting spoil dumping in channels, lining channel bottoms, revegetation, and general mined-land reclamation. Therefore, no areas in the Red Rim area were found unsuitable under criterion 16.

China Butte

Introduction

No unsuitable areas were identified in the China Butte area under coal unsuitability criteria 1 through 8, 10, 12, or 17 through 20.

Criterion 9—Federally Listed Threatened or Endangered Species Habitat

No areas in the China Butte area were determined to be unsuitable under criterion 9; however, some potential habitat areas for black-footed ferrets have not yet been searched to determine whether or not ferrets are present. The necessary searches and consultation with USFWS will be conducted during coal activity planning.

Criteria 11 and 13—Bald and Golden Eagle Nests and Falcon Cliff Nesting Sites

No areas were determined to be unsuitable under criterion 11 or 13. The area is acceptable for further consideration for leasing subject to the following conditions:

For the protection of nesting eagle, and prairie falcons and their associated buffer zones, no surface operations will be allowed in such areas as long as the USFWS determines that the nest is viable (see map 20). If any exceptions are granted for support facilities such as telephone lines, power lines, pipelines, or surface facilities, no surface-disturbing activities will be permitted in such areas during breeding and nesting seasons (prairie falcons, March 15 through July 15; golden eagles, February 15 through July 15). In addition, such exceptions will be subject to restrictive placement and type or design of facilities and to seasonal occupancy restrictions, and they may be allowed only with prior written permission of the authorized officer of the BLM upon concurrence of the USFWS and consultation with the WGFD.

Larger disturbances such as upgrading of existing roads or construction of new roads, buildings, or railroad facilities within the buffer zone will not be permitted. Since these and other bird species may move onto or off a given area or elsewhere in the project area, their activities must be monitored to determine changing protection requirements. If any new nests should become established on or within 1 mile of the lease area during the course of mining, the lessee will consult with the USFWS to determine mitigative measures that may be needed to protect nesting birds.

Criterion 14—Migratory Bird Habitat

No areas in the China Butte area were determined to be unsuitable under Criterion 14. The area is acceptable for further consideration for leasing subject to the following conditions:

Surface disturbance and occupancy restrictions may be required to protect ferruginous hawk nesting areas within raptor nest concentration areas. Therefore, the lessee must submit to the BLM, the USFWS, the OSMRE, and the WGFD a habitat recovery and replacement plan for protection or enhancement of ferruginous hawk populations affected by habitat loss or displacement from present or historical habitat. The habitat recovery and replacement plan shall be developed in consultation with the BLM, the OSMRE, the WGFD, and the USFWS. It may be submitted before or concurrently with the filing of the mine permit application package. The BLM, the OSMRE, the WGFD, and the USFWS will be allowed a minimum of 120 days to review the habitat recovery and replacement plan and to resolve any conflicts or problems in the plan.

The final habitat recovery and replacement plan must provide the locations, current status, and reproductive history (two years minimum) of each nest on or within 2 miles of the lease area and shall indicate the methods to be employed by the lessee to ensure that ferruginous hawk productivity and habitat diversity will not decline in the area.

The plan must include, but not be limited to, consideration of the following points:

Nest site protection during the nesting season.

Enhancement and protection of adjacent nesting habitat that will not be affected by mining disturbance (for example, construction of rock structures or pillars or actions intended to increase habitat diversity).

Relocation of unoccupied nests to enhance other suitable habitat before surface disturbance begins.

Restoration of topographic features and vegetative composition to restore nesting habitat and prey diversity affected by mining.

Facilitation of raptor nest protection with private landowners and other public entities on lands adjacent to the lease area.

The plan must include a timetable for implementation of the habitat recovery or replacement plan in relation to the overall mine plan. Since these and other bird species may move onto or off a given area or elsewhere in the project area, their activities must be monitored to determine changing protection requirements. If any new ferruginous hawk nests should become established on or within 1 mile of the lease area during the course of mining, the lessee will consult with the USFWS to determine mitigative measures that may be needed to protect nesting hawks.

Criterion 15—Habitat for State High-Interest Wildlife and Plants

No areas in the China Butte area were determined to be unsuitable under criterion 15. The primary habitat considerations in the China Butte coal area are crucial winter range for antelope and deer and sage grouse leks.

If all or a significant portion of the crucial winter range for one or more of the big game species involved were to be mined or made available for

mining during one time span, there probably would be significant long-term impacts on the survival of the herds. However, in considering the exceptions to the criterion, the BLM determined that there will not be significant long-term impacts on the species being protected under certain stipulated methods of mining (such as habitat recovery, limited surface occupancy, or other mitigation requirements) or under sequential mining over a long period to maintain a proper mix and balance between areas disturbed by mining and undisturbed areas.

Further, mitigative measures will be combined with appropriate mining methods to temper the impacts of mining in crucial winter range for big game. Sufficient forage will be provided to maintain WGFD target populations for wintering antelope and deer in the area. Therefore, these areas were determined to be acceptable for coal development with certain stipulated methods of mining and mitigation requirements under a concept of long-range leasing and development.

It was determined that grouse habitat areas are acceptable for coal development with stipulations and mitigation requirements for habitat improvement, development, and reclamation.

The China Butte coal area is acceptable for further consideration for leasing subject to the following conditions:

The lessee shall not disturb the area within a mile of the center of sage grouse strutting/nesting complexes except on areas that are to be mined. Any proposals for surface facilities or activities within a 2-mile radius of the center of sage grouse strutting/nesting complexes will be subject to seasonal occupancy restrictions as determined to be feasible by the authorized officer of the BLM. This measure may partially mitigate losses of sage grouse.

The lessee holder shall attempt to relocate sage grouse strutting/nesting complexes that would be destroyed by the proposed action. Relocation efforts are to be coordinated with the BLM and the WGFD. This measure may partially mitigate a reduction in the sage grouse population of the area. (See the wildlife habitat portion of the multiple-use conflict evaluation later in this appendix for reclamation requirements.)

Criterion 16—Floodplains

It was determined that the floodplain area of Fillmore Creek can be mined by all or certain stipulated methods of coal mining without substantial threat of loss to people or property and to the natural and beneficial values of the floodplain, either on a coal lease tract or downstream. Examples of mitigation may include relocation of channels during mining and restoration of channel locations after mining, control of sediment yields and prohibition of spoil dumping in channels, lining channel bottoms, revegetation, and general mined-land reclamation. Therefore, no areas in the China Butte area were found unsuitable under criterion 16.

Indian Springs and North Indian Springs

Introduction

No unsuitable areas were identified in the Indian Springs and North Indian Springs areas under coal unsuitability criteria 1, 3 through 8, 10, 12, or 17 through 20.

Criterion 2—Rights-of-Way and Easements

Most of the rights-of-way crossing the coal areas in Indian Springs and North Indian Springs can be relocated to accommodate coal mining and related activities. Thus, the BLM made a general determination that right-of-way areas are acceptable for coal development, subject to valid existing rights and negotiations for relocating if necessary. Any unforeseen conflicts in these areas should be identified and resolved during the coal activity planning process or during development of mining and reclamation plans.

Criterion 9—Federally Listed Threatened or Endangered Species Habitat

No areas in Indian Springs and North Indian Springs were determined to be unsuitable under criterion 9; however, some potential habitat areas for black-footed ferrets have not yet been searched to determine whether or not ferrets are present. The necessary searches and consultation with USFWS will be conducted during coal activity planning.

Criteria 11 and 13—Bald and Golden Eagle Nests and Falcon Cliff Nesting Sites

No areas were determined to be unsuitable under criterion 11 or 13. The area is acceptable for further consideration for leasing subject to the following conditions:

For the protection of nesting eagles and prairie falcons and their associated buffer zones, no surface operations will be allowed in such areas as long as the USFWS determines that the nest is viable (see maps 31 and 32). If any exceptions are granted for support facilities such as telephone lines, power lines, pipelines, or surface facilities, no surface-disturbing activities will be permitted in such areas during breeding and nesting seasons (prairie falcons, March 15 through July 15; golden eagles, February 15 through July 15). In addition, such exceptions will be subject to restrictions on location, type or design of facilities, and season of occupancy, and they may be allowed only with prior written permission of the authorized officer of the BLM after concurrence of USFWS and consultation with WGFD.

Larger disturbances such as upgrading of existing roads or construction of new roads, buildings, or railroad facilities within the buffer zone will not be permitted. Since these and other bird species may move onto or off a given area or elsewhere in the project area, their activities must be monitored to determine changing protection requirements. If any new nests should

become established on or within 1 mile of the lease area during the course of mining, the lessee will consult with the USFWS to determine mitigative measures that may be needed to protect nesting birds.

Criterion 14—Migratory Bird Habitat

No areas in the Indian Springs and North Indian Springs areas were determined to be unsuitable under criterion 14. The area is acceptable for further consideration for leasing subject to the following conditions:

Surface disturbance and occupancy on about 6,000 acres will be limited to very small-scale and seasonal uses because active ferruginous hawk nests are present. This area includes all of the Indian Springs area and all of the North Indian Springs area except T. 22 N., R. 89 W., section 8, W $\frac{1}{2}$ E $\frac{1}{2}$, W $\frac{1}{2}$, and section 28, SW $\frac{1}{4}$. Small surface disturbances such as pipelines, restricted use roads, and raptor-safe power lines may be allowed in the area so long as they are consistent with all current planning and management decisions and mitigation, and provided that no human activity or surface disturbance occurs during the nesting season (March 15 through July 31) and that the nest substrate (cliff, rimrock, tree, or other substrate) is not modified to disturb nesting ferruginous hawks.

Larger disturbances like upgrading of existing roads or construction of new roads, buildings, or railroad facilities within nest buffer zones would not be permitted.

A lease would be subject to the following mitigation:

- Any federal coal recovered from the Indian Springs Tract will be recovered by in situ coal development methods only.
- The lessee must submit to the BLM, the USFWS, the OSMRE, and the state of Wyoming (WGFD and DEQ) a habitat recovery and replacement plan for protection or enhancement of ferruginous hawk populations affected by habitat loss or displacement from present or historical habitat. The habitat recovery and replacement plan shall be developed in consultation with the BLM, the OSMRE, the state of Wyoming (WGFD and DEQ), and the USFWS. It may be submitted before or concurrently with the filing of the mine permit application package. However, because serious impacts can result from an inadequate plan, the BLM, the OSMRE, the state of Wyoming (WGFD and DEQ), and the USFWS would be allowed a minimum of 120 days to review the habitat recovery and replacement plan and to resolve any conflicts or problems in the plan. Close coordination among the BLM, the OSMRE, the state of Wyoming (WGFD and DEQ), and the USFWS during development of the plan will minimize the time needed for review and concurrence.
- The final habitat recovery and replacement plan must provide the locations, current status, and reproductive history (two years minimum) of each nest on or within 2 miles of the lease area and shall indicate the methods to be employed by the lessee to ensure that ferruginous hawk productivity and habitat diversity will not decline in the area. Where rock features are disturbed, reclamation shall ensure replacement of the habitat in kind.
- For the protection of nesting ferruginous hawks and their associated buffer areas, no surface operations will be permitted in such areas. If any exceptions are granted for support facilities such as telephone lines, power lines, pipelines, or sur-

face facilities, no surface-disturbing activities will be permitted in such areas during breeding and nesting seasons (March 15 through July 31). In addition, such exceptions will be subject to restrictive placement and type or design of facilities and to seasonal occupancy restrictions, and they may be allowed only with prior written permission of the authorized officer of the BLM upon concurrence of the USFWS and the WGFD.

Since these and other bird species may move onto or off a given area or elsewhere in the project area, their activities must be monitored to determine changing protection requirements. If any new ferruginous hawk nests should become established on or within 1 mile of the lease area during the course of mining, the lessee will consult with the USFWS to determine mitigative measures that may be needed to protect nesting hawks.

Criterion 15—Habitat for State High-Interest Wildlife and Plants

No areas in Indian Springs or North Indian Springs have been determined to be unsuitable for in situ coal development methods under criterion 15. However, surface disturbances and occupancy on approximately 3,000 acres of pronghorn crucial winter range will be limited to very small-scale and seasonal uses (see maps 31 and 32) and the wildlife habitat portion of the multiple-use conflict evaluation later in this appendix for reclamation requirements).

Criterion 16—Floodplains

It was determined that in situ coal development of Indian Springs and North Indian Springs could be undertaken without substantial threat of loss of life or property. Therefore, no areas were found unsuitable under Criterion 16 (floodplains).

Atlantic Rim

Introduction

No unsuitable areas were identified in the Atlantic Rim area under coal unsuitability criteria 1 through 8, 10, 12, 16 through 18, or 20.

Criterion 9—Federally Listed Threatened or Endangered Species Habitat

No areas in the Atlantic Rim area were determined to be unsuitable under criterion 9; however, some potential habitat areas for black-footed ferrets have not yet been searched to determine whether or not ferrets are present. The necessary searches and consultation with USFWS will be conducted during coal activity planning.

Criteria 11, 13, and 14—Bald and Golden Eagle Nests, Falcon Cliff Nesting Sites, and Migratory Bird Habitat

No areas were determined to be unsuitable under criterion 11, 13, or 14. The area is acceptable for further consideration for leasing subject to the following conditions:

For the protection of nesting eagles, prairie falcons, and ferruginous hawks and the buffer zones associated with the nests of these species, no surface coal mining operations will be allowed in such areas (see map 28). If any exceptions are granted for support facilities such as telephone lines, power lines, pipelines, or small scale surface facilities, no surface-disturbing activities will be permitted in nesting areas or buffer zones during breeding and nesting seasons (eagles, February 15 through July 15; other raptors, March 15 through July 15). Such exceptions will be allowed only with prior written permission of the authorized officer of the BLM after concurrence of the USFWS and consultation with the WGFD. In addition, such exceptions will be subject to restrictions on locations, type or design of facilities, and season of occupancy.

Since these and other bird species may move onto or off a given area or elsewhere in the project area, their activities must be monitored to determine changing protection requirements. If any new nests should become established on or within 1 mile of the lease area during the course of mining, the lessee will consult with the USFWS to determine mitigative measures that may be needed to protect nesting birds.

Criterion 15—Habitat for State High-Interest Wildlife and Plants

No areas in the Atlantic Rim area were determined to be unsuitable under criterion 15. The primary habitat consideration in the coal area is crucial winter and yearlong range for elk. The elk rely on a total yearlong range of 784,000 acres, of which about 327,000 acres is winter range and about 131,000 acres (17% of the total range) is crucial habitat, as defined under this criterion. Approximately 3,556 federal acres of this crucial habitat lie within this coal area.

The Atlantic Rim area is acceptable for further consideration for leasing subject to the following conditions:

The area will be subject to mitigation and reclamation measures for the protection of wintering and yearlong resident elk. Any proposals of the lessee to conduct mining operations or construct mining-related surface facilities within the Atlantic Rim coal area will be subject to stipulations for specific placement, design, and type of facilities, management of elk forage; and restrictions on the level of mining and human activity. These stipulations and restrictions will be developed in consultation with the WGFD and in conference with the USFWS, the Wyoming Wildlife Federation, and the National Wildlife Federation. The stipulations and restrictions will address the following situations:

- Elk need to get to the north end of the Atlantic Rim during severe winters. Mining activity will be confined to west-facing slopes, and no activity will be permitted east of the line indicated on map 28. This will keep in people and mining activity out of sight of elk moving to the north via the east ridge. Impacts on resident elk will be minimized throughout the year.

- Aspen patches are the primary thermal and hiding cover for resident elk. These patches are primarily in and along the major drainages of the Atlantic Rim area. So that impacts on the elk herd can be minimized and the hydrologic integrity of the drainages in which aspen patches occur can be maintained, aspen patches in the major drainages will be protected from disturbance by mining or related support facilities (see map 28).
- Routes for access to Atlantic Rim and for transportation of coal from the area will be restricted to those found acceptable through consultation with the WGFD and other interested parties. This will minimize effects on wildlife while allowing consideration of the coal market and any foreseeable coal development in the area. Given present knowledge, the Twenty-Mile Road from Rawlins to the west side of the Atlantic Rim coal area appears to be the least environmentally sensitive route.
- Considerable amounts of winter forage would be unavailable to elk because of mine disturbance and activity. Sufficient forage would be provided to maintain WGFD target populations for wintering elk on the Atlantic Rim portion of the Baggs Elk Crucial Winter Range. The degree of overlap of foraging areas, and thus the dietary overlap between elk and cattle, will be determined, and adjustments in livestock management will be made if necessary. Other mechanisms for replacement of forage, such as fertilization or vegetation manipulation, also will be considered. Artificial feeding will not be considered for forage replacement. The best mechanism or combination of mechanisms will be used to reduce impacts to the elk population.
- Since the potential pit sites are part of the crucial elk winter range, human activity should be restricted to the mine site as much as possible. A threshold level of mining activity will be identified beyond which the elk population would be displaced from the winter range. Among other items, this threshold level of activity may address the number of separate pits operated simultaneously, the total amount of acreage disturbed at any given time, and the sequence of pit operations.

Application of this unsuitability criterion was done in consultation and coordination with other governmental agencies and public groups, as discussed in chapter 5 of this document.

Criterion 19—Alluvial Valley Floors

When the coal unsuitability review for the project area was conducted, possible alluvial valley floor areas were identified in two drainages that are in or near the project area—Separation Creek (in Jep Canyon) and Muddy Creek.

No areas were determined to be unsuitable under criterion 19. The area is acceptable for further consideration for leasing subject to the following conditions:

In identified possible alluvial valley floor areas or in other areas near them where the proposed coal mining could interrupt or intercept water flow to farming areas along the drainages, mining will be permitted only with mitigative measures for alluvial valley floor protection that are made a part of an approved mine plan. The state of Wyoming usually identifies alluvial valley floor areas and mitigative measures (if possible) during the mining plan approval and mine permitting stage.

Hanna Basin

Introduction

Coal unsuitability criteria were applied to the unleased federal coal with development potential in the Hanna Basin. No unsuitable areas were identified under coal unsuitability criteria 1, 4 through 8, 10, 12, or 17 through 20.

Criterion 2—Rights-of-Way and Easements

Most of the rights-of-way crossing the coal areas in Hanna Basin can be relocated to accommodate coal mining and related activities. Thus, the BLM made a general determination that right-of-way areas are acceptable for coal development, subject to valid existing rights and negotiations for relocating if necessary, along with appropriate stipulations and consistency with current planning and management decisions. Any unforeseen conflicts in these areas should be identified and resolved during the coal activity planning process or during development of mining and reclamation plans.

Criterion 3—Public Roads, Cemeteries, Buildings, and Occupied Dwellings

Split estate coal lands in T. 22 N., R. 81 W., section 18, W $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, were determined to be unsuitable under criterion 3 because of an occupied dwelling on the parcel. Approximately 20 acres containing 400,000 tons of coal are unsuitable.

Criterion 9—Federally Listed Threatened or Endangered Species Habitat

No areas in Hanna Basin were determined to be unsuitable under criterion 9. Some potential habitat areas for black-footed ferrets have not yet been searched to determine whether or not ferrets inhabit the areas. The necessary searches and consultation with the USFWS will be conducted during coal activity planning.

Some survey of bald eagle wintering areas and areas used during migration has been conducted. The WGFD has identified a bald eagle wintering area along the Medicine Bow River adjacent to the Hanna Basin area, but additional fieldwork is required to document the size of the area and its importance. Data from BLM surveys during 1978 and 1979 indicate that eagles made little use of this area. A possible additional area has been identified along the North Platte River. No bald eagle nests have been identified.

No recent sightings of peregrine falcons have been documented for this area. Some limited poten-

tial for nesting peregrine falcons exists along Seminole Reservoir, Medicine Bow River, and possibly Hanna Draw because of the presence of perennial streams and associated nesting sites.

Criteria 11, 13, and 14—Bald and Golden Eagle Nests, Falcon Cliff Nesting Sites, and Migratory Bird Habitat

After filing of an expression of interest and before tract delineation, the BLM will reinventory any proposed tract and adjacent land to refine the application of criteria 11, 13, and 14. If the inventory should reveal the presence of species or habitats involving these criteria, the BLM would coordinate with the USFWS and the WGFD to determine if any federal coal lands within the proposed tract area should be declared unsuitable.

Criterion 15—Habitat for State High-Interest Wildlife and Plants

No areas in Hanna Basin were determined to be unsuitable under criterion 15. The primary habitat considerations in the Hanna Basin coal area are sage grouse leks and crucial winter range for antelope and deer.

If all or a significant portion of the crucial winter range for one or more big game species were to be mined or made available for mining during one time span, there probably would be significant long-term impacts on the survival of the herds. However, in considering the exceptions to the criterion, the BLM determined that there will not be significant long-term impacts on the species being protected under certain stipulated methods of mining (such as habitat recovery, limited surface occupancy, or other mitigation requirements) or under sequential mining over a long period to maintain a proper mix and balance between areas disturbed by mining and undisturbed areas.

Further, mitigative measures will be combined with appropriate mining methods to temper the impacts of mining in crucial winter range for big game. Therefore, these areas were determined to be acceptable for coal development with certain stipulated methods of mining and mitigation requirements under a concept of long-range leasing and development.

It was determined that grouse habitat areas are acceptable for coal development with stipulations and mitigation requirements for habitat improvement, development, and reclamation.

The Hanna Basin Coal area is acceptable for further consideration for leasing subject to the following conditions:

The lessee shall not disturb the area within a mile of the center of sage grouse strutting/nesting complexes except on areas that are to be mined. Any proposals for surface facilities or activities within a 2-mile radius of the center of sage grouse strutting/nesting complexes will be subject to seasonal occupancy restrictions as determined to be feasible by the authorized officer of the BLM. This measure may partially mitigate losses of sage grouse.

The lessee holder shall attempt to relocate sage grouse strutting/nesting complexes that would be destroyed by the proposed action. Relocation efforts are to be coordinated with the BLM and the WGFD. This measure may partially mitigate a reduction in the sage grouse population. (See the wildlife habitat portion of the multiple-use conflict evaluation later in this appendix for reclamation requirements.)

Criterion 16—Floodplains

It was determined that most identified floodplain areas in Hanna Basin can be mined without substantial threat of loss to people or property or to the natural and beneficial values of the floodplain, either on a coal lease tract or downstream. Examples of mitigation may include control of sediment yields and prohibition of spoil dumping in channels, lining channel bottoms, revegetation, and general mined-land reclamation.

The floodplain of the Medicine Bow River in T. 23 N., R. 81 W., section 6, was found unsuitable for mining under criterion 16. This involves approximately 10 acres containing 15,000 tons of federal coal. All other floodplain areas in the Hanna Basin were determined to be acceptable with mitigation, as discussed above.

Step 3: Multiple-Use Conflict Evaluation

Introduction

As required by 43 CFR 3420.1-4(e)(3), multiple land-use decisions were made on areas found suitable upon application of the unsuitability criteria. Step 3, evaluation of multiple-use conflicts, provides for the protection of locally, regionally, or nationally important or unique resource values and land uses not included in the unsuitability criteria.

Groundwater and Surface Water Resources

Potential impacts on groundwater and surface water resources are of concern in the Indian Springs, North Indian Springs, and Atlantic Rim areas. Mitigation will be applied in those areas to reduce the effects due to possible aquifer removal, interruption of groundwater flow, change in ground-

water flow from replaced overburden, water quality changes from spoil material leaching and mixing between aquifers, and subsidence and/or fracturing of overlying rocks.

No areas are unacceptable; however, the following mitigation requirements will be applied:

The lessee shall prepare and submit to the BLM, concurrently with the filing of a permit application package, a hydrologic mitigation study. The study must include a factual statement of the following:

- Identification of all affected surface water, water table (unconfined), and artesian (confined) waters, including the location and direction of movement of all groundwater.
- Appropriate characteristics of the waters, which might include yield or flow; conductance; pH; temperature; alkalinity; total dissolved solids; dissolved amounts of such elements as sulfates, chlorides, barium, cadmium, copper, iron, lead, radioactive materials, turbidity; and total dissolved oxygen.
- Identification of development activities that would affect the above waters, and the probable impact on such waters from each activity.
- A discussion of the interrelationships between surface water and groundwater in the project area and the likely effects on this relationship from development of the federal coal.
- Identification of proposed mitigative measures to reduce the impacts identified in (c) above.
- A plan for monitoring surface water and groundwater conditions in the project area and downstream from the project. The water quality standards of the Wyoming Department of Environmental Quality and the U.S. Public Health Service shall be used where applicable.

In addition, the following mitigation requirement will be applied in the Indian Springs and North Indian Springs areas.

In accordance with state law and regulation, the permit application package submittal shall include a detailed description of the effects of possible mined land subsidence and faulting. This must include the proposed measures to be taken to prevent or minimize the effects of subsidence and faulting and procedures that will be taken in terms of backfilling, grading, contouring, etc., in the event that any subsidence or faulting occurs.

Wildlife Habitat

Loss of wildlife habitat for varying lengths of time on surface-mined areas, roads, railroads, and facilities is unavoidable. In addition to the loss of habitat, some areas will become unusable by animals that are intolerant of human activity. No additional areas have been determined to be unacceptable; however, the following mitigation requirements will be applied in the Indian Springs, North Indian Springs, Atlantic Rim, Red Rim, China Butte, and Hanna Basin areas:

- Recovery of wildlife habitat on the project area will be required. The lessee will be required to mitigate habitat loss caused by surface coal mining operations in the project area. Where crucial habitat is disturbed, reclamation will ensure replacement of that habitat in kind. Mitigation methods may require the lessee to employ techniques for wildlife forage manipulation or intensive wildlife habitat management.

- Habitat recovery may not be completely feasible in the project area; therefore, recovery or replacement may be accomplished on lands outside the project area in combination with recovery and replacement methods on suitable lands within the project area. Such habitat recovery provisions must be acceptable to the BLM, the WGFD, and the USFWS. Lands outside the project area for such habitat recovery may be made available through the surface management agency, the state, or the lessee. In regard to the above, the lessee will be required to develop a habitat recovery and replacement plan designed to protect and/or enhance wildlife habitat. This plan shall be prepared before mining plan approval, in consultation with and subject to approval by the BLM, the USFWS, the OSMRE, and the state of Wyoming. The habitat recovery and replacement plan shall include, but will not be limited to, the following provisions:

- A detailed description of the methods selected by the lessee to mitigate habitat loss, together with a comparative analysis of alternate methods that were considered and rejected by the lessee, and the rationale for the decision to select the proposed methods. The replacement may include, but is not limited to, the following techniques:
 - Increasing the quantity and quality of forage available to wildlife
 - The acquisition of wildlife crucial habitats
 - Manipulation of wildlife habitat for selected wildlife species
 - Recovery, replacement, or protection of important wildlife habitat by selected methods such as modifying or eliminating fencing. Construction of new fences will be kept to a minimum on winter ranges and within migration routes. Fencing will be coordinated with the WGFD to ensure protection of these resources.
 - Wildlife watering developments.
- A timetable giving the periods of time that will be required to accomplish the habitat recovery or replacement plan and showing how this timetable relates to the overall mining plan.
- An evaluation of the final plan by the state of Wyoming. The state will comment on the methods selected and the techniques to be employed by the lessee and may recommend alternate recovery or replacement methods. If the state has recommended alternate methods, the lessee shall consider the state's recommendations and, if the lessee rejects the state's recommendations, the lessee shall indicate its reasons as required by provision B, above. If no state comment is included in the plan, the lessee shall verify its consultation with the state and the plan may be considered without state comment.
- A habitat analysis of the lease area (including a 2-mile buffer around the lease area) and those areas considered for off-site mitigation. The analysis shall identify the following features:
 - Distribution of important wildlife species (game, non-game, sensitive species, species of high federal interest, and threatened or endangered species)
 - Distribution of important standard habitat types

Fisheries, Water Quality, and Recreation

Proposed coal development could cause significant adverse impacts at the Seminole Reservoir, which is managed by the Bureau of Reclamation. Adverse impacts that could result from coal develop-

ment are (a) interruption or interception of ground-water and surface water systems; (b) water transfer between the reservoir and mining pits, which could degrade water quality and impair fisheries habitat, recreational activities, and downstream water uses; and (c) impairment of scenic quality through visual intrusion of the mining operation and related recreational activities. Further analysis is available in the "Amendment to the Hanna Basin Management Framework Plan and Draft Environmental Assessment" (USDI, BLM and USDI, GS 1984).

For the protection of the water values of Seminole Reservoir, the BLM and the Bureau of Reclamation have jointly determined that no surface occupancy will be allowed within a 200-foot buffer zone between any surface coal mining operation and the high-water design elevation of 6,363.7 feet. Approximately 3,420 acres containing 22.4 million tons of coal are within this buffer zone.

Producing Oil and Gas Areas

As of this date, a draft policy addressing development conflicts between coal/oil and gas is being considered for adoption. The final policy will guide actions involving coal/oil and gas conflicts.

Lands Near Populated Areas

Federal coal lands in T. 22 N., R. 81 W., section 16, NW $\frac{1}{4}$ NW $\frac{1}{4}$, and section 18, S $\frac{1}{2}$ NW $\frac{1}{4}$, are near the towns of Hanna and Elmo. The impacts of coal development on the residents of Hanna and Elmo are a concern. In addition, there are structures on federal land in section 18 related to Hanna's water system.

These lands have been determined to be acceptable for further consideration subject to mitigation. Specific mitigative measures to protect the quality of life and provide for improvements on the land would have to be acceptable to the residents of Hanna and Elmo. These measures should be worked out in coordination with local residents as soon as the BLM receives any possible lease proposal.

Step 4: Surface Owner Consultation

Section 714 of the Surface Mining Control and Reclamation Act (SMCRA) requires that the BLM consult with certain "qualified" owners of "split estate" lands (privately owned surface over federally owned coal) when surface mining of the federal coal is being considered.

In step 4 of the coal planning process, surface owners who may be "qualified" under section 714 of

APPENDIX II

SMCRA are asked to state their opinion for or against surface coal mining on their land. Areas where a significant number of qualified owners oppose surface mining of federal coal are eliminated from consideration for this method.

This step does not apply to areas where only sub-surface mining methods are concerned. It involves only split estate lands within competitive federal coal areas that remain acceptable for development by surface mining methods after the multiple-use conflict evaluation has been conducted.

The Red Rim, Indian Springs, North Indian Springs, and China Butte areas do not contain split estate lands as defined in this section.

Split estate lands in the Atlantic Rim coal area are as follows:

T. 18 N., R. 90 W., section 28, W $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$

T. 19 N., R. 89 W., section 31, all.

Split estate lands in the Hanna Basin coal area are as follows:

T. 21 N., R. 82 W., section 4, lots 1 and 2, S $\frac{1}{2}$ NE $\frac{1}{4}$

T. 22 N., R. 81 W., section 18, NE $\frac{1}{4}$ NW $\frac{1}{4}$

T. 23 N., R. 80 W., section 4, lots 3 and 4, E $\frac{1}{2}$ S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$

T. 23 N., R. 84 W., section 23, W $\frac{1}{2}$ SE $\frac{1}{4}$; section 35, NW $\frac{1}{4}$ NW $\frac{1}{4}$

These split estate lands are owned by four qualified surface owners, all of whom were contacted by letter. Replies from three of the qualified surface owners indicated that they were not against surface mining. The fourth qualified surface owner did not reply. The letter sent by the BLM stated that if no reply was received, we would assume the surface owner had no preference against surface mining. Therefore, no lands were eliminated from further consideration on the basis of surface owner consultation.

BLANK PAGE

GLOSSARY

ACTIVITY PLANNING. Site-specific planning that precedes development. This is the most detailed level of BLM planning. An activity plan details management of one or more resources on a specific site. Examples are allotment management plans and recreation area management plans. Activity plans implement decisions made in the RMP.

ACTUAL USE. The number of livestock actually grazing on a given allotment. The use made of forage by livestock or wildlife without reference to permitted or recommended use.

ALLOTMENT. An area allocated for the use of the livestock of one or more qualified grazing lessees. It generally consists of BLM-managed lands but may include parcels of private or state-owned lands. The number and kind of livestock and period of use are stipulated for each allotment. An allotment may consist of several pastures or may be only one pasture.

ALLOTMENT MANAGEMENT PLAN. A concisely written program of livestock grazing management, including supportive measures, if required, designed to attain specific management goals in a grazing allotment. An AMP is prepared in consultation with the permittee(s), lessee(s), and other affected interests. Livestock grazing is considered in relation to other uses of the range and in relation to renewable resources such as watershed, vegetation, and wildlife. An AMP establishes seasons of use, the number of livestock to be permitted, the range improvements needed, and the grazing system.

ANIMAL DAMAGE CONTROL. The control of animals that are causing economical losses to agriculture, damage to property, or causing hazards to human health. This control usually results in killing the offending animal(s).

ANIMAL UNIT. A standardized unit of measurement for range livestock or wildlife. Generally, one mature (1,000-pound) cow or its equivalent, based on an average daily forage consumption of 26 pounds of dry matter per day.

ANIMAL UNIT MONTH. A standardized unit of measurement of the amount of forage necessary for the sustenance of one animal unit for one month; also, a unit of measurement that represents the privilege of grazing one animal unit for one month.

AREA OF CRITICAL ENVIRONMENTAL CONCERN. An area within the public lands designated for special management attention to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards.

BOARD FOOT. A unit of solid wood 1 foot square and 1 inch thick.

CASUAL USE. Activities ordinarily resulting in no appreciable disturbance of public lands, resources, or improvements; for example, activities that do not involve the use of mechanized earthmoving equipment or explosives or, in areas designated as closed to ORVs, do not involve the use of motorized vehicles.

CATEGORY 1, 2, or 3 CANDIDATE SPECIES. Classification by the Fish and Wildlife Service, U.S. Department of the Interior, of taxonomic groups or species of plants or animals that are being considered for listing as either threatened or endangered under the Endangered Species Act of 1973, as amended.

Category 1 refers to species or taxonomic groups for which the USFWS has on file substantial information on biological vulnerability and threat(s) to support the appropriateness of proposing to list them as endangered or threatened. Data are being gathered on category 1 species concerning precise habitat needs and, for some, the precise boundaries for critical habitat designations.

Category 2 refers to species or taxonomic groups for which information in possession of the USFWS indicates that listing them as endangered or threatened species is possibly appropriate, but for which substantial data on biological vulnerability and threat(s) are not known or on file. Further research and field study usually will be necessary to ascertain the status of category 2 species, and some will not warrant listing while others will be found to be in greater danger of extinction than some listed in category 1.

Category 3 refers to species or taxonomic groups that are no longer being considered for listing as threatened or endangered, some because there is persuasive evidence of extinction, some because they do not meet the act's definition of "species," and some because they have proven to be more abundant or widespread than was previously believed.

CLASSIFICATION AND MULTIPLE USE. Refers to both the Classification and Multiple Use Act of 1964 and the classifications that were placed on the lands pursuant to that act. The objective of the C&MU act was to provide an opportunity for the BLM to categorize lands for multiple use management and for disposal. The act provided four years for the BLM to classify lands for multiple use management by prohibiting disposal or entry under various public land laws to be specified in the particular classification document.

The C&MU classifications referred to in this document prohibited disposal under the Isolated Tracts Act (Revised Statutes 2455) and entry under the agricultural entry laws (Homestead Act, Desert Land Act, and others); portions of the C&MUs also prohibited entry under the General Mining Law of 1872. Today, the multiple use provisions of FLPMA fulfill the purpose and objectives of the C&MU classifications.

"CLOSED" DESIGNATION (ORV). Vehicle travel is prohibited yearlong with no exceptions other than for emergency vehicles in emergency situations. Access by means other than motorized vehicles is permitted.

COMMERCIAL FORESTLAND. Forestland that is now producing or is capable of producing at least 20 cubic feet of wood fiber per acre per year from commercial coniferous tree species, and which has met certain economic, environmental, or multiple use criteria for inclusion in the commercial forestland base.

CRUCIAL HABITAT. Habitat on which a species depends for survival because there are no alternative ranges or habitats available.

CRUCIAL WINTER RANGE. The portion of the winter range to which a wildlife species is confined during periods of heaviest snow cover.

CULTURAL RESOURCE. A fragile and nonrenewable remnant of human activity, occupation, or endeavor reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture, or natural features.

CULTURAL RESOURCE INVENTORY. A descriptive listing and documentation, including photographs and maps, of cultural resources. Processes involved are locating, identifying and recording of sites, structures, buildings, objects, and districts through library and archival research; collecting information from persons knowledgeable about cultural resources; and conducting on-the-ground field surveys of varying levels of intensity. Also see Cultural Resource Inventory Classes.

CULTURAL RESOURCE INVENTORY CLASSES. A Class I inventory of a defined area provides a narrative overview derived from existing information and a compilation of existing data on which to base the development of the BLM's site record system. A Class II inventory is a sample-oriented field inventory designed to locate and record, from surface and exposed profile indications, all cultural resource sites

GLOSSARY

within a portion of a defined area to make possible an objective estimate of the nature and distribution of cultural resources in the entire defined area. A Class III inventory is an intensive field inventory designed to locate and record all cultural resource sites within a specified area. Upon completion of such an inventory, no further cultural resource inventory work is normally needed in that area.

CULTURAL RESOURCE MANAGEMENT PLAN. A plan designed to inventory, evaluate, protect, preserve, or make beneficial use of cultural resources and the natural resources that figured significantly in cultural systems. The objectives of such plans are the conservation, preservation, and protection of cultural values and the scientific study of those values.

CULTURAL RESOURCE SITE (cultural property). A physical location of past human activities or events. Cultural properties are extremely variable in size, ranging from the location of a single cultural resource feature to a cluster of cultural resource structures with associated objects.

DISPOSAL. Transfer of ownership of a tract of public land from the United States to another party through sale, exchange, or transfer under the Recreation and Public Purposes Act.

ENDANGERED SPECIES. Any plant or animal species that is in danger of extinction throughout all or a significant portion of its range, as defined by the U.S. Fish and Wildlife Service under the authority of the Endangered Species Act of 1973.

ENVIRONMENTAL ASSESSMENT. A record of the environmental factors involved in a land management action.

ENVIRONMENTAL IMPACT STATEMENT. A written analysis of the impacts of a proposed project and alternatives.

FEDERAL LANDS. As used in this document, lands owned by the United States, without reference to how the lands were acquired or what federal agency administers the lands. The term includes mineral estates or coal estates underlying private surface but excludes lands held by the United States in trust for Indians, Aleuts, or Eskimos. Also see Public Land.

FIRE MANAGEMENT. The integration of knowledge of fire protection, prescribed fire, and fire ecology into multiple use planning, decision making, and land management activities. Fire management places fire in perspective with overall land management objectives.

FIRE MANAGEMENT PLAN. An activity plan developed to support and accomplish resource management objectives and applicable land-use decisions authorized in BLM resource management plans. A FMP contains an economic analysis and establishes the basic direction for the fire management program. It identifies priorities for execution, and determines levels of fire resources (personnel, engines, aircraft, and facilities).

FIRE SUPPRESSION. All work activities connected with fire extinguishing operations, beginning with discovery and continuing until the fire is completely out.

FORESTLAND. Land that is now, or is capable of becoming, at least 10% stocked with forest trees, which has been developed for non timber use.

FULL SUPPRESSION. A fire suppression strategy requiring immediate and continuous aggressive attack to attain the suppression objectives with the least damage of property or loss of resources in the most cost-effective manner. Such actions may include control, containment, or confinement of wildfire to attain land management objectives.

GRAZING PREFERENCE. The total number of AUMs on public land apportioned and attached to base property owned or controlled by a lessee.

GRAZING SYSTEM. A systematic sequence of grazing use and nonuse of an allotment to reach identified multiple use goals or objectives.

HABITAT MANAGEMENT PLAN. An officially approved activity plan for a specific geographic area of public land. An HMP identifies wildlife habitat and related objectives, defines the sequence of actions to be implemented to achieve the objectives, and outlines procedures for evaluating accomplishments.

LEASEABLE MINERALS. Minerals subject to lease by the federal government, such as coal, oil and gas, oil shale, potash, sodium, phosphate, and other minerals that may be acquired under the Mineral Leasing Act of 1920, as amended. The major leaseable minerals in the planning area are oil and gas and coal.

LEK. A site used by grouse for courtship display. Also called "strutting ground" or "dancing ground." The lek is the center point of the annual reproduction cycle. Most nesting occurs within 2 miles of the lek.

"LIMITED" DESIGNATION (ORV). Vehicle travel is restricted in some manner in the area. Restrictions could take many forms, but the most common are "limited to existing roads and trails," which allows vehicle travel only on roads that were in existence at the time of designation or as authorized for future uses; "limited to designated roads and trails," which allows vehicle travel only on roads that the BLM designates by signs; and "seasonal restrictions," which restricts vehicle travel in an area or on certain roads during some portion of the year (such as winter time vehicle restrictions to protect big game on crucial winter range).

Under limitations to existing or designated roads and trails, vehicle travel off roads is permitted only to accomplish necessary tasks and only if such travel would not result in resource damage. Necessary tasks are defined as work requiring the use of a motor vehicle. Examples include picking up big game kills, repairing range improvements, managing livestock, and mineral activities where surface disturbance does not total more than 5 acres, as described in the provisions of 43 CFR 3809.1-3.

LIMITED SUPPRESSION. A deviation from normal fire suppression procedures based on a land-use decision or practiced where controlling fires is extremely difficult or dangerous, or where the values at risk do not warrant the expense associated with full suppression. Such fires will receive an appropriate suppression response.

LIMITED SUPPRESSION PLAN. A written fire management plan that is approved by the appropriate line authority and designates limited fire suppression areas. Such plans must include plan objectives, area description, fire history and effects, action planned, and evaluation procedures required.

LOCATABLE MINERALS. Generally, the metallic minerals subject to development specified in the Federal Mining Law of 1872. Examples are gold, silver, and copper.

MITIGATION. A method or process by which impacts from actions may become less injurious to the environment through appropriate protective measures. Also called mitigative measure.

MONITORING. Specific studies that evaluate the effectiveness of actions taken toward achieving management objectives.

MULTIPLE USE. Coordinated management of various surface and subsurface resources so that they are used in the combination that will best meet present and future needs.

NATIONAL REGISTER OF HISTORIC PLACES. The official list, established by the Historic Preservation Act of 1966, of the nation's cultural resources worthy of preservation.

NONCOMMERCIAL FORESTLAND. Land that is not capable of yielding at least 20 cubic feet of wood per acre per year of commercial species; also, land that is capable of producing only noncommercial tree species.

OFF-ROAD VEHICLE. Any motorized tracked or wheeled vehicle designed for cross-country travel over any type of natural terrain. Exclusions (from Executive Order 11644, as amended by Executive Order 11989) are nonamphibious registered motorboats, any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes, any vehicle whose use is expressly authorized by the authorizing officer or otherwise officially approved, vehicles in official use, and any combat support vehicle in times of national defense emergencies.

"OPEN" DESIGNATION (ORV). Vehicle travel is permitted in the area (both on and off roads) if the vehicle is operated responsibly in a manner that will not cause significant undue damage to the soil, wildlife, vegetation, cultural resources, or other important resources on the public lands.

PERENNIAL STREAM. A stream that flows throughout the year.

PREFERENCE. Grazing privileges established following the passage of the Taylor Grazing Act, based on the use of the federal range during the priority period. The active preference and suspended preference together make up the total grazing preference.

PRESCRIBED FIRE. The application of fire in a controlled manner to a specified area under specific weather conditions (a prescription) to achieve predetermined resource management objectives; the use of fire as a resource management tool.

PUBLIC LAND. As used in this document, federally-owned surface or mineral estate specifically administered by the Bureau of Land Management. Also see Federal Lands.

RANGE IMPROVEMENT. Any activity or program on or relating to rangelands that is designed to improve production of forage, change vegetation composition, control patterns of use, provide water, stabilize soil and water conditions, or provide habitat for livestock, wild and free-roaming horses and burros, or wildlife. Range improvement projects may be fences, reservoirs, brush control, or spring and well developments.

RANGELAND MONITORING PROGRAM. A program designed to measure changes in plant composition, ground cover, animal populations, and climatic conditions on the public rangeland. Studies monitor changes in range condition and determine the reason for any changes. Studies also monitor actual use, forage utilization, trend, and climatic conditions.

RECREATION AND PUBLIC PURPOSES. RAPP refers to both the Recreation and Public Purposes Act [(43 USC 869(a))] and the uses to be made of public land transferred under the act. The objective of the RAPP Act is to meet the needs of state and local government agencies and nonprofit organizations by leasing or conveying public land required for recreation and public purpose uses. Examples of uses made of RAPP lands are parks and greenbelts, sanitary landfills, schools, religious facilities, and camps for youth groups. The act provides substantial cost benefits for land acquisition and provides for recreation facilities or historical monuments at no cost.

RIGHT-OF-WAY. The legal right of use, occupancy, or access across land or water areas for a specified purpose or purposes. Also, the lands covered by such legal rights.

GLOSSARY

RIPARIAN. Situated on or pertaining to the bank of a river, stream, or other body of water. Normally used to refer to plants of all types that grow rooted in the water table of streams, ponds, and springs.

RIPARIAN COMMUNITIES. Communities of vegetation associated with either open water or water close to the surface. Examples are meadows, aspen, and other trees and shrubs associated with water.

SALABLE MINERALS. Minerals that may be sold under the Mineral Sale Act of 1947, as amended. Included are sand, gravel, flagstone, scoria, and crushed rock such as limestone.

SAWTIMBER. Trees that have reached sufficient size and maturity to be used for "dimension lumber" such as 2 x 4s.

SEASON OF USE. The time during which livestock grazing is permitted on a given range area, as specified in the grazing lease.

SPATIAL MANAGEMENT. As used in this document, intensive control of the location and level of surface disturbance that would be allowed in a particular area.

SPLIT ESTATE. Surface and minerals of a given area in different ownerships. Frequently the surface will be privately owned and the minerals federally owned.

STIPULATION. A condition or requirement attached to a lease or contract, usually dealing with protection of the environment or recovery of a mineral.

STRUTTING GROUND. An area used by sage grouse in early spring for elaborate, ritualized courtship displays. Also see Lek.

SURFACE DISTURBANCE. Disturbance of the vegetative or soil surface by any action. "No surface disturbance" restrictions apply to all activities but casual use and emergency situations such as fire suppression.

SURFACE OCCUPANCY. Placement or construction on the land surface of semipermanent or permanent facilities requiring continual service or maintenance. Casual use is not included.

TEMPORAL MANAGEMENT. As used in this document, intensive control of the period during which the BLM will allow activities that are physiologically disturbing or disrupting to normal wildlife activities such as elk migration.

THREATENED SPECIES. Any plant or animal species that is likely to become an endangered species throughout all or a significant portion of its range, as defined by the U.S. Fish and Wildlife Service under the authority of the Endangered Species Act of 1973.

UNSUITABILITY CRITERIA. Criteria of the federal coal management program by which lands may be assessed unsuitable for all or certain stipulated methods of coal mining. See Appendix II.

VISUAL RESOURCE. Visible feature of the landscape such as land, water, vegetation, animals, and other features that make up the scenery of an area.

VISUAL RESOURCE MANAGEMENT. The system by which the BLM classifies and manages scenic values and visual quality of public lands. The system is based on research that has produced ways of assessing aesthetic qualities of the landscape in objective terms. After inventory and evaluation, lands are given relative visual ratings (management classes), which determine the amount of modification allowed to the basic elements of the landscape.

GLOSSARY

VISUAL RESOURCE MANAGEMENT CLASSES. Visual resource management classes are the degree of acceptable visual change within a characteristic landscape. A class is based on the physical and sociological characteristics of any given homogeneous area and serves as a management objective. The four classes are described below:

Class I provides for natural ecological changes only. This class includes primitive areas, some natural areas, some wild and scenic rivers, and other similar areas where landscape modification activities should be restricted.

Class II areas are those where changes in any of the basic elements (form, line, color, or texture) caused by management activity should not be evident in the characteristic landscape.

Class III includes areas where changes in the basic elements (form, line, color, or texture) caused by a management activity may be evident in the characteristic landscape. However, the changes should remain subordinate to the visual strength of the existing character.

Class IV applies to areas where changes may subordinate the original composition and character; however, they should reflect what could be a natural occurrence within the characteristic landscape.

WATERSHED. A total area of land above a given point on a waterway that contributes runoff water to the flow at that point. Sensitive watershed is an area with fragile geologic, soil, or vegetative conditions, where small changes in the intensity of land use can cause large changes in erosion rates.

WETLANDS. Permanently wet or intermittently flooded areas where the water table (fresh, saline, or brackish) is at, near, or above the soil surface for extended intervals, where hydric wet soil conditions are normally exhibited, and where water depths generally do not exceed two meters.

WILDFIRE. A free-burning fire requiring a suppression response.

WITHDRAWAL. An action that restricts the use of described public lands from operation of certain laws, which are also described in the withdrawal order. Withdrawal also may be used to transfer jurisdiction or management to other federal agencies.